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STATE OF CALIFORNIA
The Resources Agency
Department of Water Resources

BULLETIN No. 179-70

WATERMASTER SERVICE
IN THE
WEST COAST BASIN
LOS ANGELES COUNTY

FOR PERIOD

OCTOBER 1, 1969 THROUGH SEPTEMBER 30, 1970

DECEMBER 1970

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources

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FOREWORD

The West Coast Basin has been operating under a well-defined management plan for several years. One phase of the management plan limits ground water extractions from the basin. This phase is monitored by a Court-appointed Watermaster (California Department of Water Resources) that reports significant ground water activity to the Court and other interested parties.

The Watermaster has prepared this annual report for the parties to the West Coast Basin Judgment and the Superior Court of Los Angeles County to present a comprehensive review of the water conditions in the West Coast Basin during the 1969-70 water year. Authorization for this report is contained in subparagraph 6, paragraph IX of the Judgment rendered by the Superior Court of Los Angeles County in the action: "California Water Service Company, et al., vs. City of Compton, et al., No. 506806".

This report contains information on ground water extractions, use of imported water, recharge operations, the administration of the Exchange Pool, and a financial report on Watermaster Service during the 1969-70 water year.



James J. Doody
District Engineer
Southern District
and Watermaster
Reg. C.E. No. 6500

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The Resources Agency
DEPARTMENT OF WATER RESOURCES

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ABSTRACT

A reliable supply of good quality fresh water is a valuable asset to any community. / The West Coast Basin is a relatively small, but extremely important, ground water basin underlying the southwestern part of the Los Angeles Coastal Plain. Watermaster Service, provided by the California Department of Water Resources, helps to protect and guarantee continued use of ground water by the residents of the area. / The Watermaster has prepared this annual report for the Superior Court and the parties to the Judgment. This report contains information on ground water extractions, use of imported water, recharge operation, sea-water barrier operations, and the administration of the West Coast Basin Judgment. It also serves as a financial report on the cost of Watermaster Service during the 1969-70 water year.



CHAPTER I. THE WEST COAST BASIN

The West Coast Basin is a relatively small ground water basin underlying the southwestern part of the Los Angeles Coastal Plain. The sketch on the facing page shows us that the basin is bounded on the south and west by the Pacific Ocean, on the north by the Ballona Escarpment, and the east by the Newport-Inglewood Uplift. For further details, see Plate 1 on page 2.

Most of the 160 square mile basin supports an urban-suburban culture. There are 19 incorporated cities claiming a share of the basin's surface area (in this report, the term West Coast Basin is used for both the ground water basin and the overlying area). Fortunately, a substantial portion of the water needed by the cities can be pumped directly from the basin below.

Obviously, ground water is important to the people who live and work in the West Coast Basin. Some twenty years ago, when declining water levels triggered sea-water intrusion which threatened the ground water supply, timely legal action halted the overdraft and prevented serious damage to the basin. Today, ground water use in the West Coast Basin is monitored by a court-appointed Watermaster. The Watermaster's prime job is to control ground water use and report all significant water-related events that occur in the West Coast Basin to the Court and parties.

Watermaster Service

Watermaster Service is administered by the California Department of Water Resources in accordance with Part 4, Division 2, of the California Water Code. Watermaster Service Areas are created by the Department either at the request of water users or by order of the Superior Court. The first Watermaster Service Area was formed on September 1929. Currently there are 19 such areas controlling the surface water diversions in Northern California and 4 in Southern California controlling ground water use.

The primary purpose of the program is to reduce friction and increase rapport among water users of a water supply that is in critical demand. The cost of the program is shared equally by the State and those receiving the service.

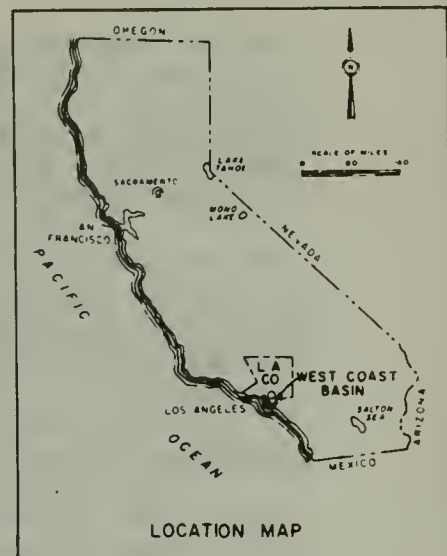
Scope of Report

This is the Watermaster's annual report to the Superior Court of Los Angeles County -- and to you as a water user or interested observer of water conditions in the West Coast Basin. The purpose of this report is to describe water supply conditions in the West Coast Basin during the water year 1969-70 (October 1, 1969 through September 30, 1970).

Detailed comments have been prepared on the following topics: the history of water resources development, natural and artificial ground water replenishment, use of imported and exported water, ground water extractions, sea-water intrusion barriers, and fluctuations of the ground water table.

Extensive coverage -- in each case a complete chapter -- has been devoted to the Watermaster's administration of the Judgment and the cost of Watermaster Service during the 1969-70 water year.





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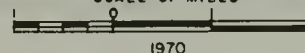
- BASIN BOUNDARY
- ACTIVE WELLS OF PARTIES
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- INACTIVE WELLS ON WHICH CONTINUOUS RECORDERS MEASURING WATER LEVEL FLUCTUATIONS ARE MAINTAINED BY D.W.R.
- ♦ LOS ANGELES COUNTY FLOOD CONTROL DISTRICT OBSERVATION WELLS
- LINE OF INJECTION WELLS
- PRECIPITATION STATION
- PROPOSED LINE OF INJECTION WELLS

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT

WEST COAST BASIN WATERMASTER SERVICE

LOCATION OF WELLS
AND
PRECIPITATION STATIONS

SCALE OF MILES



1970

History of Water Resources Development

One hundred years ago, the Los Angeles Coastal Plain was poised on the threshold of a development boom. The key to the future of the West Coast Basin was water.

The definite absence of adequate surface supplies in the West Coast Basin forced the early development of ground water sources. As early as 1870 Inglewood and Long Beach had tapped the artesian wells and springs east of the Newport-Inglewood Uplift for use in the West Coast Basin. When the artesian wells ceased to flow, water users were forced to drill small wells for reliable water supplies. By 1904, about 100 wells were producing 10,000 acre-feet of water annually from the West Coast Basin.

Ground water development spurted dramatically ahead in 1909 with the advent of the deep well turbine pump. Tremendous adaptability and superior operating characteristics of the new pump placed efficient water wells within economic reach of everyone. Reliable water supplies attracted industry and agriculture. Each new business required water. Eventually, the demand for ground water exceeded the natural replenishment of the West Coast Basin.

The resulting overdraft was clearly indicated by dropping ground water levels and expanding areas of sea-water intrusion. Indeed, water levels throughout the basin dropped below sea level during the 1920's. Water wells along Santa Monica Bay were abandoned before 1920 because the water was too salty for use. By 1932, the entire coastal reach of the West Coast Basin was invaded by sea water. The ground water problem was serious and deteriorating each year.

Ground water conditions became so bad in 1945 that the California Water Service Company, the City of Torrance, and the Palos Verdes Water Company filed suit in Superior Court of Los Angeles County. The Plaintiff's objectives: quiet title to the ground water rights of each pumper, and establish control over ground water extractions from the basin. Other organizations moved immediately to support the litigation. The West Basin Water Association was formed in 1946. It promptly sponsored a team of legal advisors to represent the major water producers named in the suit.

A plan to manage the West Coast Basin's water resources began to materialize. The plan would:

1. Provide a supplemental water supply to major producers.
2. Limit ground water extractions from the West Coast Basin.
3. Create an exchange water pool to provide pumping rights for water users without access to supplemental water.

Phase 1 was realized in 1947 when the West Basin Municipal Water District was formed to distribute water from the Colorado River. The District was annexed to the Metropolitan Water District of Southern California in 1948, and Colorado River water was soon flowing into the West Coast Basin.

Phases 2 and 3 were initiated when the Court held its preliminary hearings in 1946. These hearings defined the ground water problem and outlined areas where additional information and knowledge were required. Then the Court asked the California Division of Water Resources (now Department of Water Resources) to define the boundaries and determine the geologic and hydrologic characteristics of the West Coast Basin. The major water producers also retained an "Engineering Advisory Committee" to aid the Division during the investigation.

As more and more information became available, the actual magnitude of the problem grew painfully obvious. In 1949, an amended complaint added 340 parties to the suit and alleged that each party's pumping right was adverse to every other party's right.

For six years, the Division of Water Resources analyzed the physical properties of the West Coast Basin. A "Report of Referee" was filed with the Court on September 15, 1952.

Several years had passed before water users became sufficiently alarmed to take action. The ground water condition had become critical in the intervening years and direct action was needed. As a consequence, the major pumpers drafted an Interim Agreement to reduce ground water extractions until a final Judgment was approved. The Court not only approved the Interim Agreement but made it an ex parte order and appointed the Division of Water Resources Watermaster to administer the Agreement.

Litigation toward a final Judgment resumed immediately. However, more up-to-date information was needed to continue litigation, so the Court again requested and the Department of Water Resources conducted an additional investigation.

A "Final Report of Referee", including data on ground water conditions between 1950 and 1956, was filed on June 8, 1961. The Report provided the information needed to draft the final Judgment. On August 8, 1961, after 16 years of litigation, the Court rescinded the Interim Agreement and signed the West Coast Basin Judgment. The new Judgment retained the Department of Water Resources as Watermaster.

During the last few years of litigation, several persons began to extract water from the basin to meet their water needs. These new pumpers were not named in the original West Coast Basin suit and were exempt from the orders of the Judgment. Therefore, a second West Coast Basin water right suit was filed on October 31, 1956 to bring each new pumper under the Judgment.

Litigation in "Case No. 668,965, Dominguez Water Corporation, et al., vs. American Plant Growers, Incorporated, et al." terminated on March 24, 1966. The Judgment obtained Superior Court Jurisdiction over several producers that were not named in the original suit.

The second suit (often called the American Plant Growers Case) originally named 60 parties. Later, 57 more parties were added to the list. Seventy-six parties were actually served. Ten filed disclaimers; eight answered and claimed a pumping right; twenty-six parties defaulted claiming no right; and several parties were dismissed from the action.

The California Department of Water Resources was named Watermaster and the second suit parties were merged with the parties named in the original suit for administrative purposes. Since the conclusion of the second suit, there has been no significant litigation in the West Coast Basin.

Activities of the Watermaster

The Watermaster has now administered the West Coast Basin Judgment for nine years. Always, the focal point of activity has been the annual report to the Superior Court and the parties. The annual report is filled with information gathered throughout the water year; so much information, in fact, that it has become necessary to use electronic data processing machines extensively. It is felt that the speed and accuracy of machines easily offset the small expense charged for machine rental.

Once a month, every ground water pumper reports his ground water extractions on preprinted forms prepared and supplied by the Watermaster. This makes possible the updating of his water right account (Watermaster Water Production Summary) by electronic machines which compute the amount pumped during the previous month, the total amount pumped thus far during the current water year, and the amount that can legally be pumped during the remainder of the water year. A copy of the updated account is then mailed to the pumper so that he may more effectively manage his ground water right and use.

Occasionally, the Summary will indicate a pump and/or water meter malfunction. If electric meter readings are reported along with water meter readings, electric power consumption can be correlated with water production. Erratic or rapidly increasing electric power consumption vs. water production, for instance, may suggest an inefficient pump, system losses, or an inaccurate water meter.

The Watermaster field staff calibrates the water meter on every active water well at least once a year. Accurate measurement of ground water extractions is absolutely necessary to the success of the Basin's management plan. Every available means, including system efficiency tests, are used to confirm water meter test results. Inaccurate meters (outside the $\pm 5\%$ of accuracy range) must be repaired within thirty days. Follow-up tests on repaired meters and initial test on new wells are scheduled whenever necessary. One copy of each test is furnished to the well owner and another copy is retained by the Watermaster for comparison with future tests.

Twice during the water year, once in the fall and once in the spring, the depth to the static ground water level was measured in about 350 water wells scattered about the Basin. The measurements were used to prepare "fall" and "spring" contour maps of the ground water surface and a "fall to fall" map showing areas of equal elevation change over a one-year period.

These are the major activities of the West Coast Basin Watermaster. Of course, there are many others -- but most do not require enough time to be considered major activities. Therefore, instead of trying to list them, the report will continue with the results of the various activities.

Summary of Operating Conditions

Water supply and demand conditions have not changed appreciably for several years. Ground water extractions have averaged about 60,000 acre-feet annually. Imports continue to increase each year, as water requirements grow and additional supplemental sources are developed. Table 1 compares statistics for the last two water years and confirms that operating conditions are virtually unchanged from the prior water year.

TABLE 1
WATER YEAR SUMMARIES

Item	Water Year	
	1968-69	1969-70
Parties	82	81
Active pumpers	49	48
Active nonparties	4	4
Adjudicated Right, in acre-feet	64,468.25	64,468.25
Watermaster expenses	\$ 26,970.51	\$ 34,809.93
Watermaster expenses per acre-foot pumped	\$.44	\$.56
Rainfall, in inches	20.15	6.47
Injection at barrier project	36,416 acre-feet	29,461 acre-feet
Extractions	61,638 acre-feet	62,447 acre-feet
Imports	240,276 acre-feet	257,012 acre-feet
Exports	- 11,224 acre-feet	13,700 acre-feet
Total water use	290,690 acre-feet	305,759 acre-feet

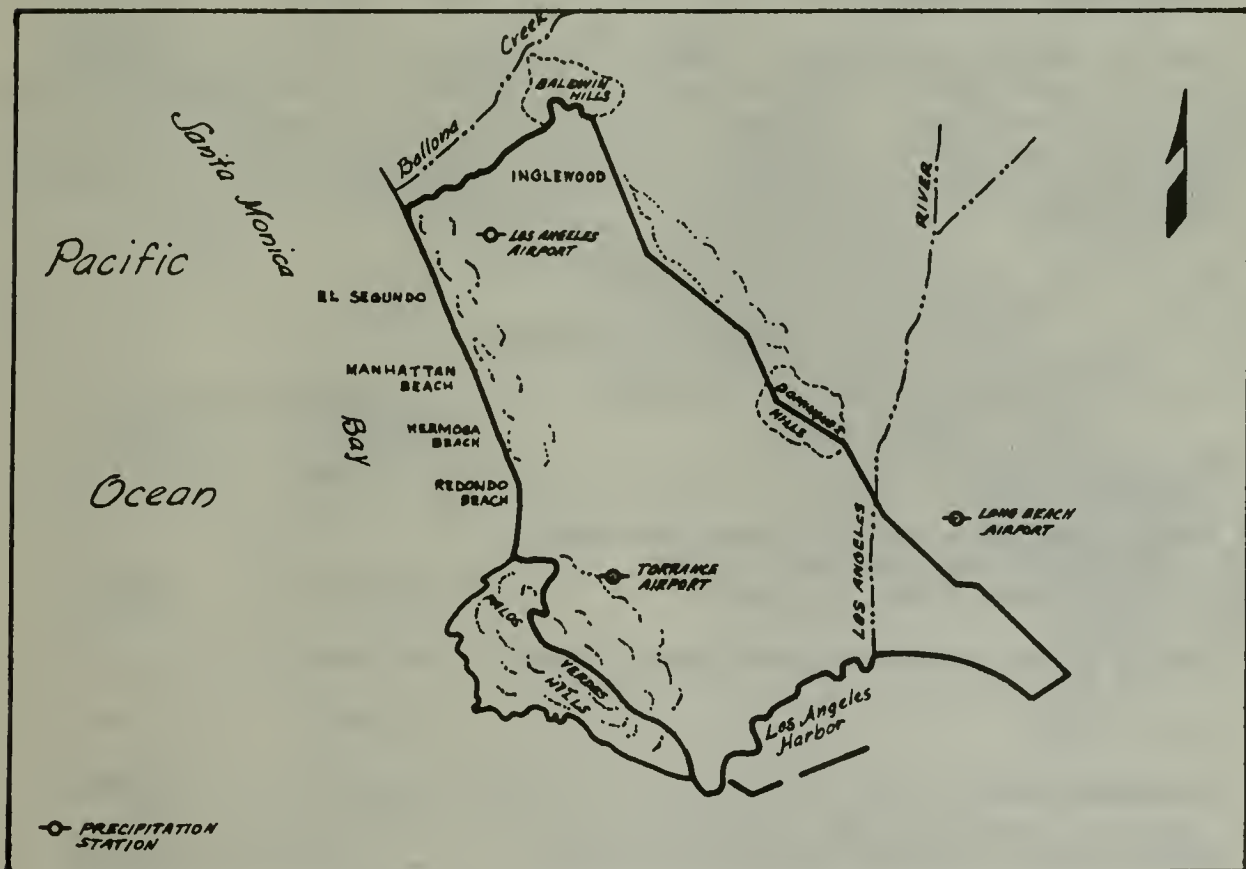
Eleven parties overextracted a total of 759.44 acre-feet during the 1969-70 water year. Three of these parties overextracted by less than the 10 percent or 2 acre-feet limited by the Judgment. The eight parties in violation purchased sufficient water from the 1970-71 West Coast Basin Exchange Pool or have been advised to by the Watermaster to obtain lease-water-rights to offset their overextraction and to meet their 1970-71 needs. As a result, the Watermaster recommends that no action be brought before the Court against these eight parties.

CHAPTER II. WATER SUPPLY CONDITIONS

Water from many sources is required to serve the needs of Southern California's thriving urban economy. Water from the Colorado River, water from the Owens River, runoff from the mountains, ground water, reclaimed waste-water, and desalination plants along the coast contribute to one of the largest, most reliable water supply systems in the world. Soon, water from Northern California will be available. This chapter explores the sources and uses of current supplies and their effect on water conditions in the West Coast Basin.

Precipitation

Southern California enjoys a Mediterranean-type climate characterized by hot, dry summers and sparse precipitation during the winter months. The average rainfall on the West Coast Basin during the 1969-70 water year was 6.47 inches, about 51 percent of the 12.73 long-time average, and 13.68 inches below the previous water year's rainfall. The locations of the precipitation stations used to determine the basin average are shown below and on Plate 1, page 2.



Local precipitation does not influence the ground water supply of the West Coast Basin to any great degree. A layer of impermeable material lies between the surface and the producing aquifers. Almost none of the annual rainfall reaches the zones from where it can be pumped back to the surface.

Ground Water Recharge

Overdraft is a condition where water is removed from a ground water basin faster than it can be replenished by natural processes. Ground water aquifers usually recharge themselves so slowly that a few years of concentrated pumping may upset a balance that took centuries to establish. Basically, this is the situation that existed in the West Coast Basin several years ago.

Natural replenishment of the basin's ground water supply is limited to underflow across the Newport-Inglewood Uplift from the Central Basin. Some of the water that percolates into the forebay areas of Central Basin eventually crosses the Central-West Coast Basin barrier and adds to the underground supply.

Today, attempts are being made to increase the underflow and reestablish nature's balance in several ways. One method is water spreading. Water is flooded on areas where it can percolate into the underground aquifers and supplement the natural recharge supply. Large quantities of water can be returned to the ground by spreading water, but the process is limited by the space available for spreading facilities and the capacity for the ground water basin to accept it.

The Los Angeles County Flood Control District (LACFCD) operates spreading grounds along the Rio Hondo and San Gabriel Rivers in the Montebello Forebay of the Central Basin. Although the spread water is not applied directly to the West Coast Basin, it does substantially increase the natural subsurface flow from Central Basin to West Coast Basin. The entire spreading operation is summarized below in Table 2.

TABLE 2
SPREADING OPERATIONS

Water Source	Quantity in acre-feet	
	1968-69	1969-70
	Water Year	Water Year
Metropolitan Water District water purchased with Central and West Basin Water Replenishment District funds	5,251	28,789
MWD water purchased with LACFCD Zone 1 funds	12,529	26,651
Local runoff	119,396 ^{1/}	55,440 ^{2/}
Reclaimed water	13,877	17,156
Makeup water from Upper San Gabriel Basin	0	0
TOTALS	151,053	128,036

^{1/} Corrected figure

^{2/} Estimated figure

Sea-Water Intrusion Barrier Projects

West Coast Basin Barrier Project

Los Angeles County Flood Control District operates and maintains the West Coast Basin Barrier Project. A line of 93 injection wells is located parallel to the coastline between Los Angeles International Airport on the north and the Palos Verdes Hills on the south. Filtered Colorado River water is injected to create a fresh water pressure ridge. Since the completion of the project in November 1968, protective ground water elevations on the barrier have been maintained in the Silverado and "200-foot sand" aquifers. Sea water intrusion along the entire reach of the project has effectively been halted. The scope of the project is shown below.



The extent of sea-water intrusion into the merged phases of the Silverado Aquifer is shown by the 500 parts per million (PPM) contour of chloride ion concentration.

The LACFCD furnished the sea-water intrusion map pictured above and the spreading operation summary shown on Table 2. In addition, the District's staff provided the information shown in Table 3. The LACFCD staff is to be commended for their fine cooperation and assistance.

TABLE 3

BARRIER OPERATIONS

Operation	: West Coast : Basin	: Dominguez : Gap
Quantity injected, in acre-feet	29,461	0
Average injection rate, cubic feet per second	41	0
Number of injection wells	93	0
Number of observation wells	263	197
Number of injection wells to be added during 1970-71 water year	0	12
Number of observation wells to be added during 1970-71 water year	0	0

The barrier is designed to halt the eastward movement of the salt water front by creating a mound of fresh injected water inland from the front. Water for the barrier is purchased by the Central and West Basin Water Replenishment District and delivered to the barrier by the Metropolitan Water District.

Dominguez Gap Barrier Project

In the second area of intrusion along San Pedro Bay, the Los Angeles County Flood Control District is constructing additional protective facilities for the West Coast Basin. The designed project, when completed, will operate in a manner similar to the West Coast Basin barrier project. The first phase of this project is virtually complete at this time and 17 injection wells are ready for use. Operation of these wells is expected to begin in November 1970. All of the observation wells have been completed and work is proceeding on the remaining 12 injection wells. It is anticipated that the project will be completed during the 1970-71 water year.

Construction Projects Affecting Water Supply

There are two major construction projects currently in progress and one completed this past year that will significantly affect the West Coast Basin's water supply. These projects are:

1. The California State Water Project. This largest water project ever undertaken will bring water from the Feather River in Northern California to Southern California by 1971. Approximately 95 percent of the facilities needed to convey Northern California water to the South have been completed or are under construction.
2. The Metropolitan Water District's proposed additions to its distribution system. Important parts of the addition are the Second Lower Feeder and the Sepulveda Feeder. Construction of the Sepulveda Feeder in the San Fernando Valley is 30 percent complete. Construction of 1.38 miles of concrete-lined tunnel 8 feet in diameter in the Encino area, is 98 percent complete. On the

Lower Feeder, construction of approximately 10 miles of concrete pipeline 78 inches in diameter, located between Alameda Street in Los Angeles County and Palos Verdes Reservoir, is completed. Each will carry Northern water into the West Coast Basin.

3. The City of Los Angeles completed construction of the second barrel of its Owens River-Mono Basin Aqueduct in June of this past water year. The second barrel terminates in the San Fernando Valley but some of the Owens River water eventually crosses the Santa Monica Mountains and moves southward into the West Coast Basin.

One other project of considerable interest to West Coast Basin water users is the Los Angeles County Joint Sanitation District's plan to reclaim waste water. Although none of the proposed facilities will be located in the West Coast Basin, considerable benefit from spreading water in the forebay areas of Central Basin may eventually materialize. There is also speculation that reclaimed water may be used to operate the two sea-water barrier projects in the basin.

Water Quality

The largest single problem facing mankind today is pollution. There are many sources of pollution and many types of pollution. Pick up any newspaper or national magazine; the odds are that it will have an article on pollution. Most of the articles deal with air pollution and surface water pollution. However, it is no secret that even underground water is endangered by pollution.

The battle for good quality water in the West Coast Basin began many years ago. In fact, it was essentially a water quality problem that prompted the West Coast Basin litigation. Many of the aquifers underlying the Los Angeles Coastal Plain are separated from each other by impervious material. However, some of the aquifers are hydraulically connected to the ocean, so occasionally one or more adjacent aquifers may become impaired by sea water. If a well is drilled downward through two aquifers, one clean, one polluted, without using proper casing techniques, water can move from the polluted aquifer to the unpolluted one. Obviously, this is an undesirable condition.

The Department of Water Resources has long recognized that such a condition should be prevented. After an extensive investigation, the Department published Bulletin No. 74, "Water Well Standards: State of California" in February 1968 and Bulletin No. 107 "Recommended Well Construction and Sealing Standards for Protection of Ground Water Quality in West Coast Basin, Los Angeles County," in August 1962. Bulletin No. 107 and its appendixes recommended specific well construction and destruction standards for the West Coast Basin. The Los Angeles Regional Water Quality Control Board held hearings on the adoption of these standards in 1969, but, by the end of the 1969-70 water year a very small percentage of the local agencies and municipalities in the West Coast Basin have adopted the standards. The Watermaster urges

unanimous adoption of these standards in the basin to preserve and protect your valuable water supply.

One of the most important pieces of legislation enacted by the 1969 Legislature was the Porter-Cologne Water Quality Control Act (Water Code, Division 7, commencing with Section 13000), effective January 1, 1970. This act made extensive revisions in California's water quality control laws and is one of the most stringent in the nation.

Under the new Act the regional boards can now enforce discharge requirements without showing the existence of conditions of pollution or nuisance. If a discharger violates requirements of the Boards, and no action is taken to correct deficiencies in discharge, the Board may request enforcement by the Attorney General. Violations of a regional board cease and desist order could result in a maximum fine of \$6,000 for each day of violation.

Solid waste disposal has become a major problem in Southern California during the past 25 years. Today, the average Californian is generating five pounds of solid waste every day of the year. It has to be disposed of somewhere.

Good dumpsites are becoming more difficult to find each year. In recent years, tremendous pressure to use abandoned gravel pits for dumpsites has developed. The Chandler Pits just south of Pacific Coast Highway in the West Coast Basin are currently being considered for disposing of solid wastes.

Several applications for permission to use the Chandler Pits for dumpsites have been refused because of potential danger to ground water. The Central and West Basin Water Replenishment District, the West Basin Water Association and other agencies have vigorously opposed these applications. On December 1968, the Regional Board reaffirmed its original findings, setting a restriction on Chandler Pits to Class III inert material. The applicant has requested permission for Class II, decomposable solid waste for the pits. As a result, the applicant appealed to the State Water Quality Control Board for which several hearings had been scheduled, but as of the end of the water year no action had been taken due to a number of postponements at the request of the applicant.

If you are interested in the ground water quality of the Coastal Plain, we recommend that you read, if you haven't done so, the report published by the State of California, Department of Public Health, Bureau of Sanitary Engineering, entitled "Investigation of Ground Water Quality Problems in the Central Basin of Los Angeles County - July 1968". It discusses many of the ground water quality problems that may already, or will in the future, face water users in the West Coast Basin.

Another report of major interest to all parties is one recently published by Bookman and Edmonston, Consulting Engineers, at the request of the Central and West Basin Water Replenishment District. The report is entitled "Management of Ground Water Quality in the Central and West Basin Water Replenishment District - November 1970" and covers: compilation and review of available data related to ground water quality; evaluation of quantity, quality, and

cost of sources of replenishment water available in the future; evaluation of water quality criteria; and projection of the future ground water quality which would exist under various illustrative management plans and the costs and benefits associated therewith.

Ground Water Levels

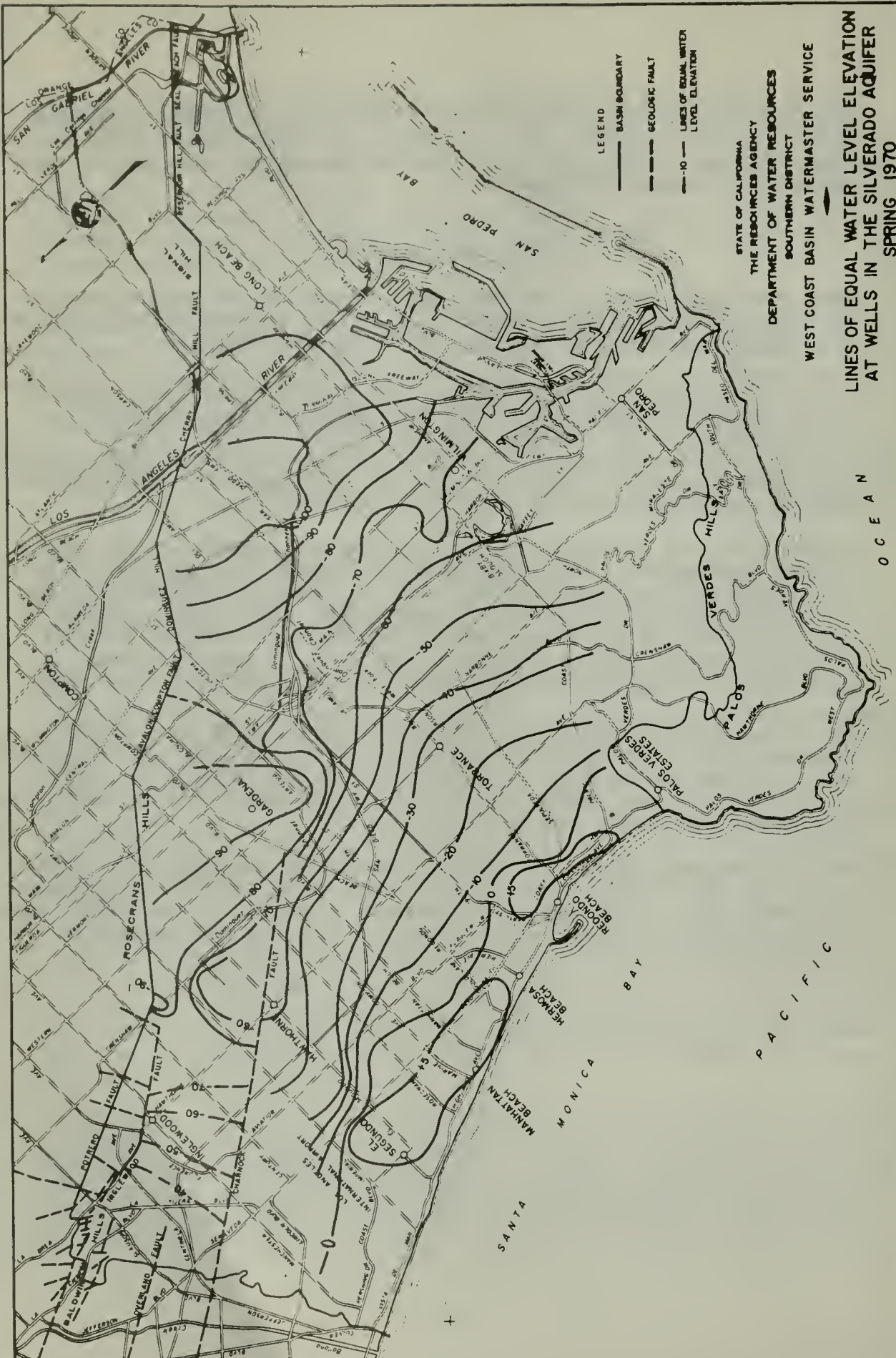
Every water well owner in the West Coast Basin has a keen interest in the location of the ground water surface. After all, the cost of pumping water is largely dependent on the distance the water must be lifted.

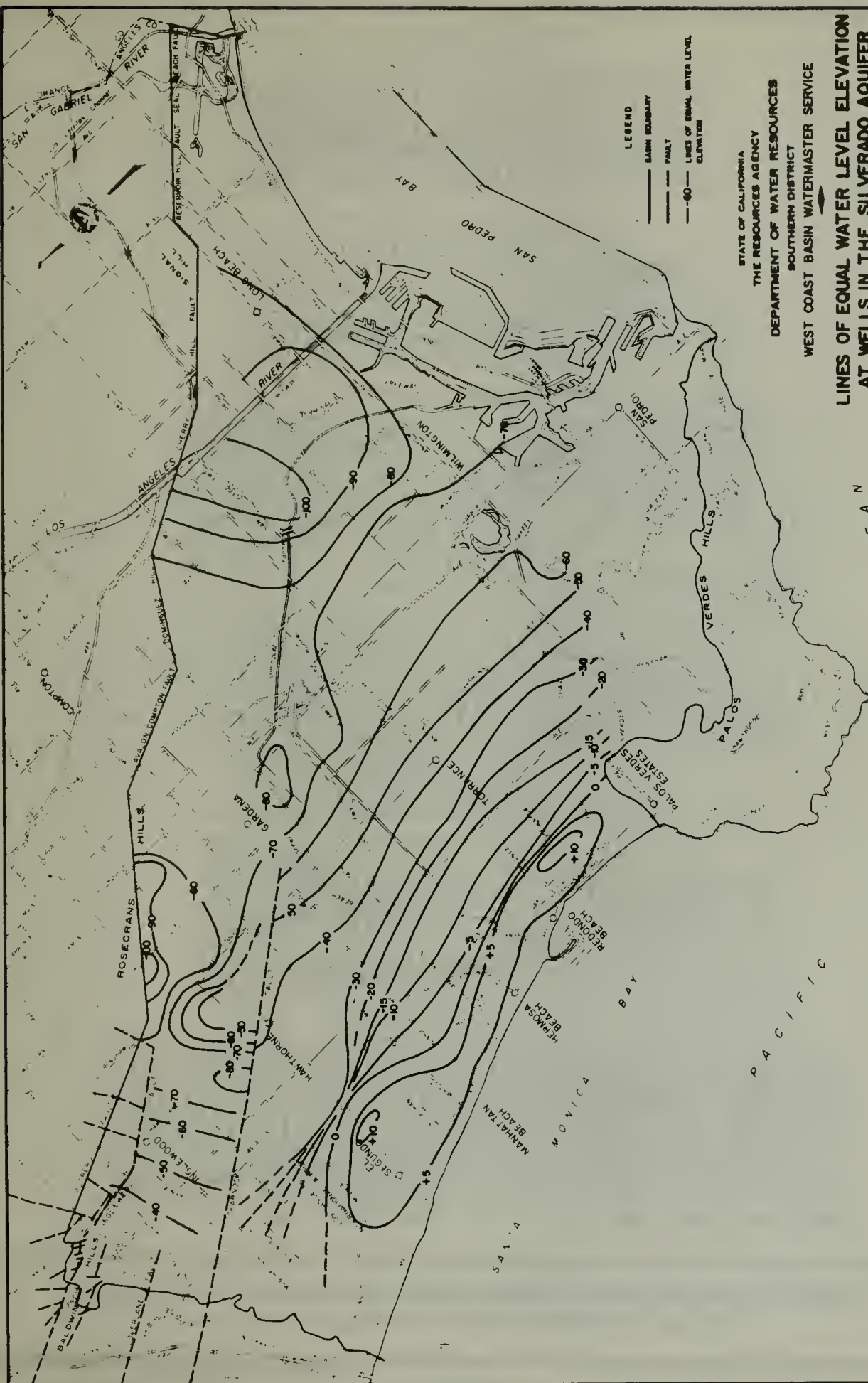
Plates 2 and 3 show the approximate elevation (from sea-level) of the water surface in the Silverado Aquifer (the most productive aquifer) as the surface existed in the spring of 1970 and the fall of 1970. Note: The Silverado aquifer varies from 100 to 500 feet in thickness and underlies most of the West Coast Basin. It is, by far, the most productive aquifer yielding about 80 to 90 percent of the basin's annual extraction.

Figures 1, 2, and 3 offer additional water level information in the form of selected hydrographs. These particular hydrographs are representative of the several aquifers underlying the basin. In general, they show that the water surface has stabilized and, in some cases, risen slightly because of recharge operations and changing extraction patterns. Plate 4 concludes our description of underground water conditions. It shows the change in ground water storage that occurred between October 1969 and October 1970.

The volume of ground water stored in the West Coast Basin is constantly changing. The change in storage depends on variations in precipitation, sub-surface inflow and outflow, artificial recharge, and extractions. Hence, Plate 4 quickly shows whether the overall ground water situation improved or deteriorated during the past water year.

Ground water conditions in the heavily pumped areas generally deteriorated during the 1969-70 water year. Plate 4 shows an increase in storage along the eastern part of the basin and a decrease in storage in the coastal area possibly due to the reduced rate of recharge along the barrier project.





LEGEND
 — BASIN BOUNDARY
 - - - FAULT
 ———— LINES OF EQUAL WATER LEVEL ELEVATION

STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SOUTHERN DISTRICT
 WEST COAST BASIN WATERMASTER SERVICE

**LINE OF EQUAL WATER LEVEL ELEVATION
 AT WELLS IN THE SILVERADO AQUIFER
 FALL 1970**

SCALE OF MILES
 0 10
 1970

WATER LEVEL ELEVATION AT WELLS IN FEET USGS DATUM

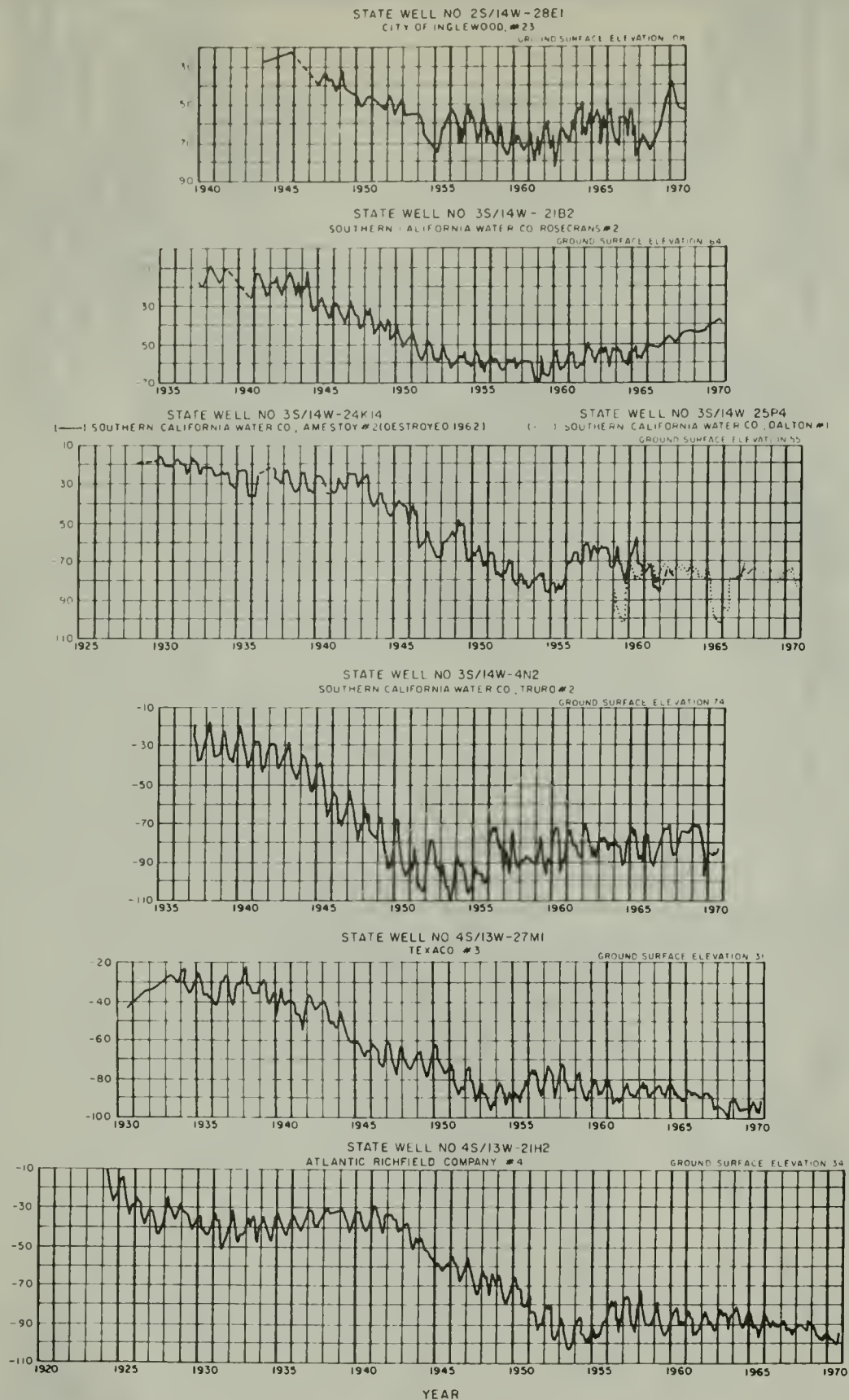
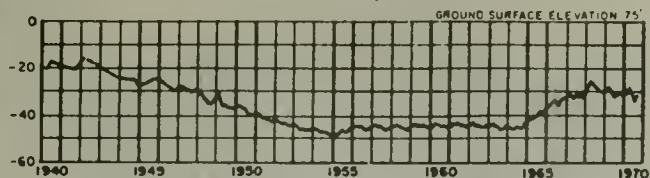


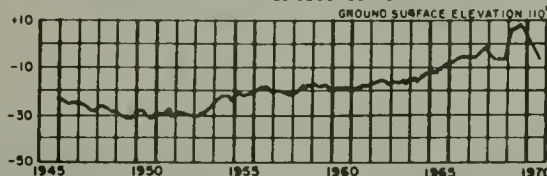
Figure 1 — FLUCTUATIONS OF WATER LEVEL ELEVATIONS AT WELLS
IN THE SILVERADO AQUIFER

DATUM
 FEET - USGS
 IN
 WELLS
 AT
 ELEVATION
 LEVEL
 WATER

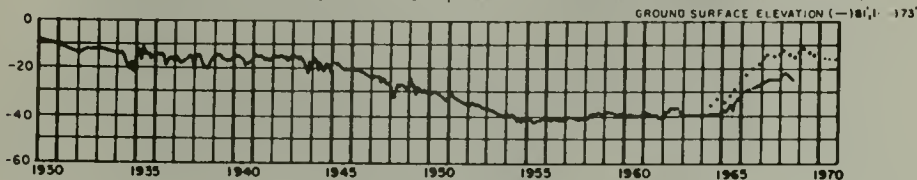
MERGED GARDENA, LYNWOOD AND SILVERADO AQUIFERS
 STATE WELL NO 4S/14W-3L3
 MOBIL OIL CO. #3



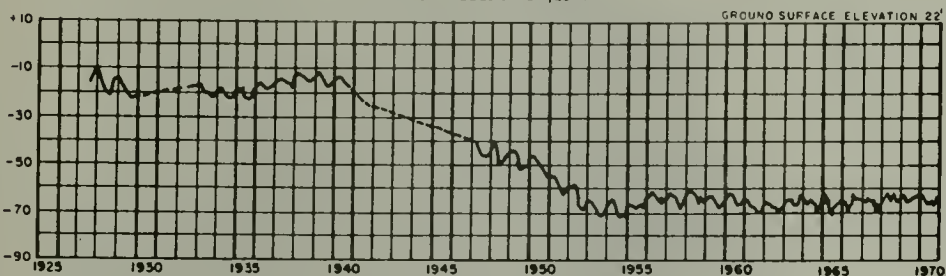
MERGED LYNWOOD AND SILVERADO AQUIFERS
 STATE WELL NO. 3S/15W-12B1
 CITY OF EL SEGUNDO #10



STATE WELL NO 4S/14W-22D1 STATE WELL NO. 4S/14W-21L2
 (—) STANDARD OIL CO. MARBLE FEE #1 (---) TORRANCE UNIFIED SCHOOL DISTRICT WELL

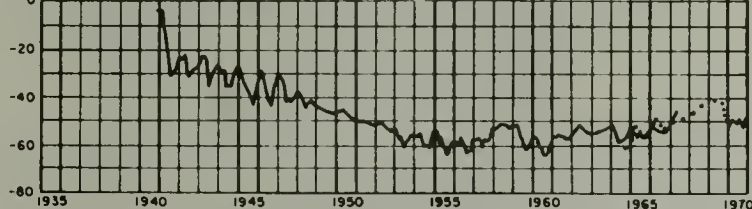


STATE WELL NO 4S/13W-31E4
 CITY OF LOS ANGELES QW 8P, LOMITA #4



LYNWOOD AQUIFER

STATE WELL NO. 3S/14W-23L1 STATE WELL NO 3S/14W-22K1
 (—) SOUTHERN CALIFORNIA WATER CO. COMPTON WELL (---) PARK WATER CO. #15C
 DESTROYED 10/19/67 GROUND SURFACE ELEVATION (-152', 1 49')



STATE WELL NO. 4S/13W-30K1
 CITY OF LOS ANGELES QW 8P LOMITA #7

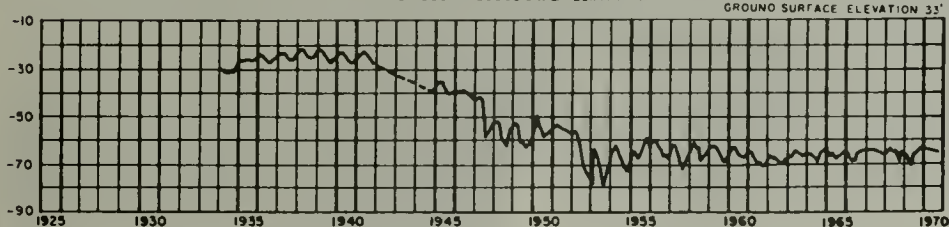


Figure 2 — FLUCTUATIONS OF WATER LEVEL ELEVATIONS AT WELLS
 IN THE MERGED PHASES OF SILVERADO AND LYNWOOD AQUIFERS

DATUM
 USGS
 FEET
 IN
 WELLS
 AT
 ELEVATION
 LEVEL
 WATER

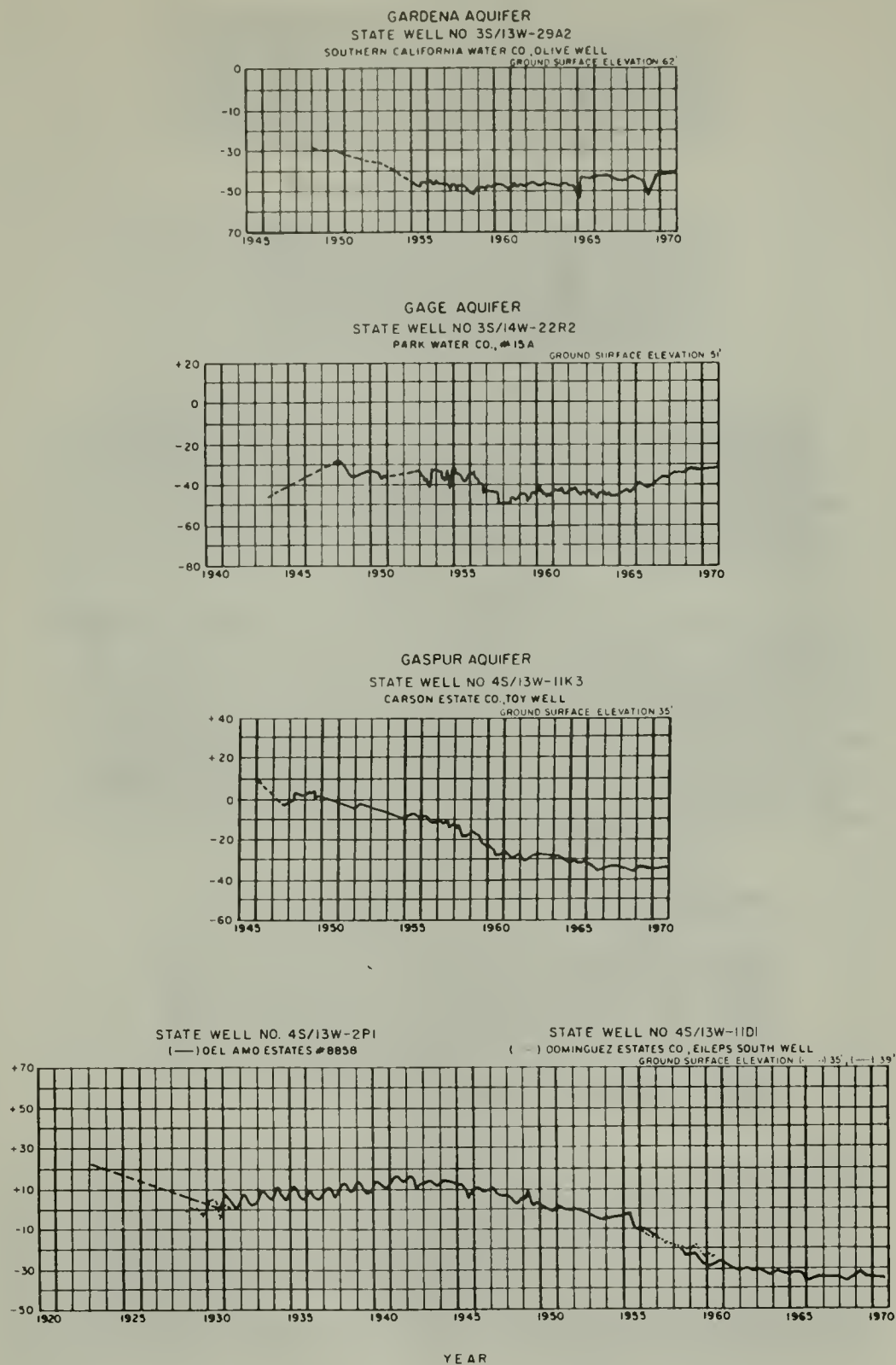
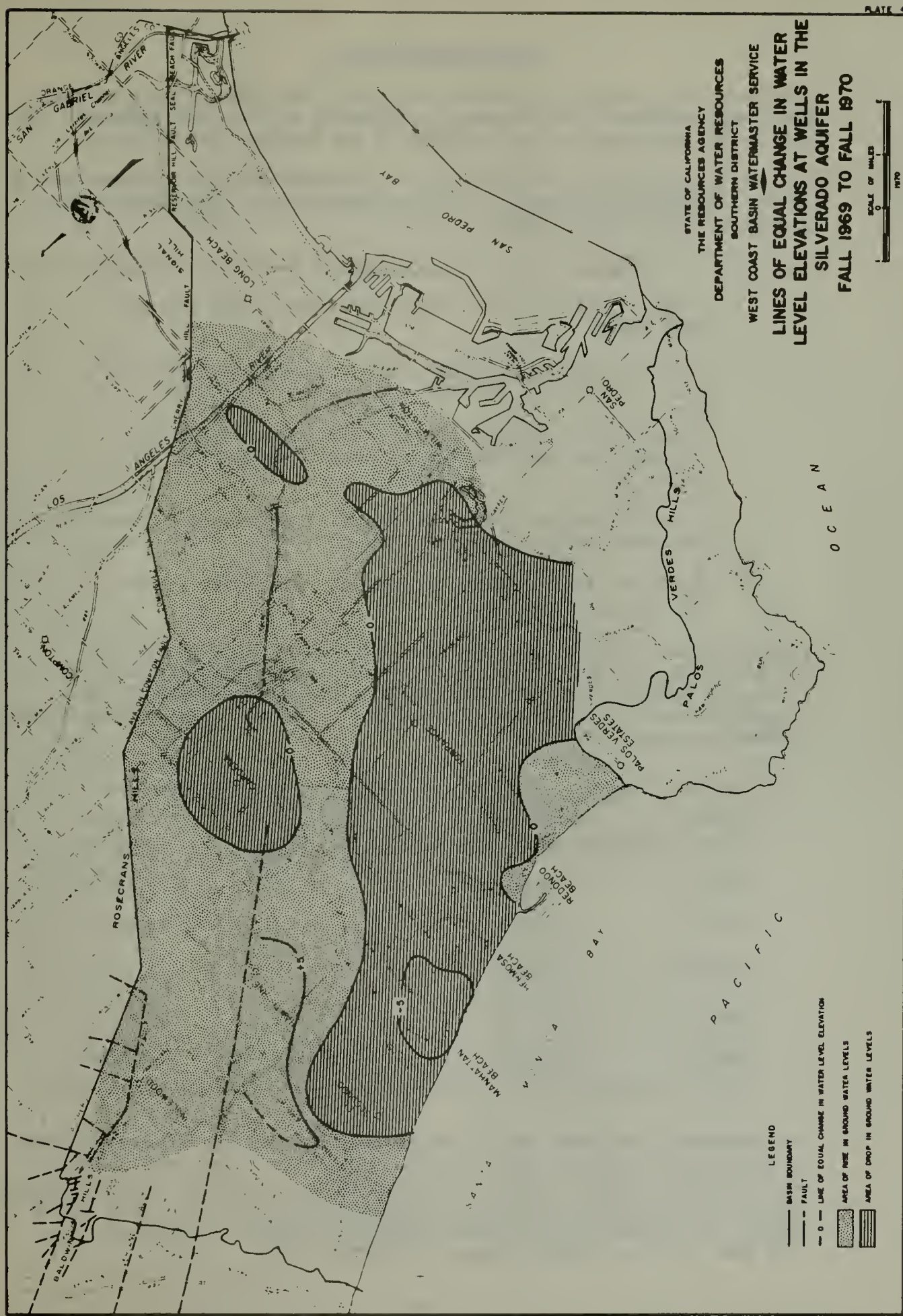
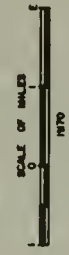


Figure 3— FLUCTUATIONS OF WATER LEVEL ELEVATIONS AT WELLS
 IN THE UPPER PLEISTOCENE AND RECENT AQUIFERS



STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SOUTHERN DISTRICT
 WEST COAST BASIN WATERMASTER SERVICE
 LINES OF EQUAL CHANGE IN WATER
 LEVEL ELEVATIONS AT WELLS IN THE
 SILVERADO AQUIFER
 FALL 1969 TO FALL 1970



- LEGEND
- BASIN BOUNDARY
 - - - FAULT
 - 0 - LINE OF EQUAL CHANGE IN WATER LEVEL ELEVATION
 - ▨ AREA OF RISE IN GROUND WATER LEVELS
 - ▤ AREA OF DROP IN GROUND WATER LEVELS

In Lieu Replenishment

Five years ago, during the 1965-66 water year, the Central and West Basin Water Replenishment District began a program of in lieu replenishment. The program is authorized by Section 60230 of the California Water Code.

In effect, the Replenishment District may contract with any producer having access to supplemental water to have the producer use supplemental water instead of pumping water from the ground.

The District's program of in lieu replenishment has the following benefits:

1. It may be used to alter pumping patterns within a ground water basin.
2. It may be used to replenish areas of low transmissibility where conventional recharge techniques are ineffective.
3. It may be used to heighten the effect of injecting water to form a sea-water barrier by reducing extractions in the vicinity.
4. It may be used to reduce the amount of replenishment water purchased by the District.
5. It may be used to reduce the annual ground water extraction from the West Coast Basin.

When the District first announced its intention to begin the in lieu replenishment program, several West Coast Basin producers expressed an interest. However, the only producer to actually participate in the program has been the California Water Service Company. The results of the program are summarized below.

Year	Amount contracted to in lieu Replenishment Program	Contract price, dollars per acre-foot	Total payment
1965-66	744.59	\$ 12.33	\$ 9,180.79
1966-67	850.57	14.14	12,027.06
1967-68	850.00	13.36	11,356.00
1968-69	850.00	14.25	12,112.50
1969-70	899.88	15.32	13,786.16

The Watermaster believes that the District's in lieu replenishment program is an effective basin management tool. Significant beneficial effects on the West Coast Basin could result from an enlarged program. Therefore, anyone interested in participating or learning more about the program should contact the Central and West Basin Water Replenishment District at 7439 East Florence Avenue, Downey, California 90240.

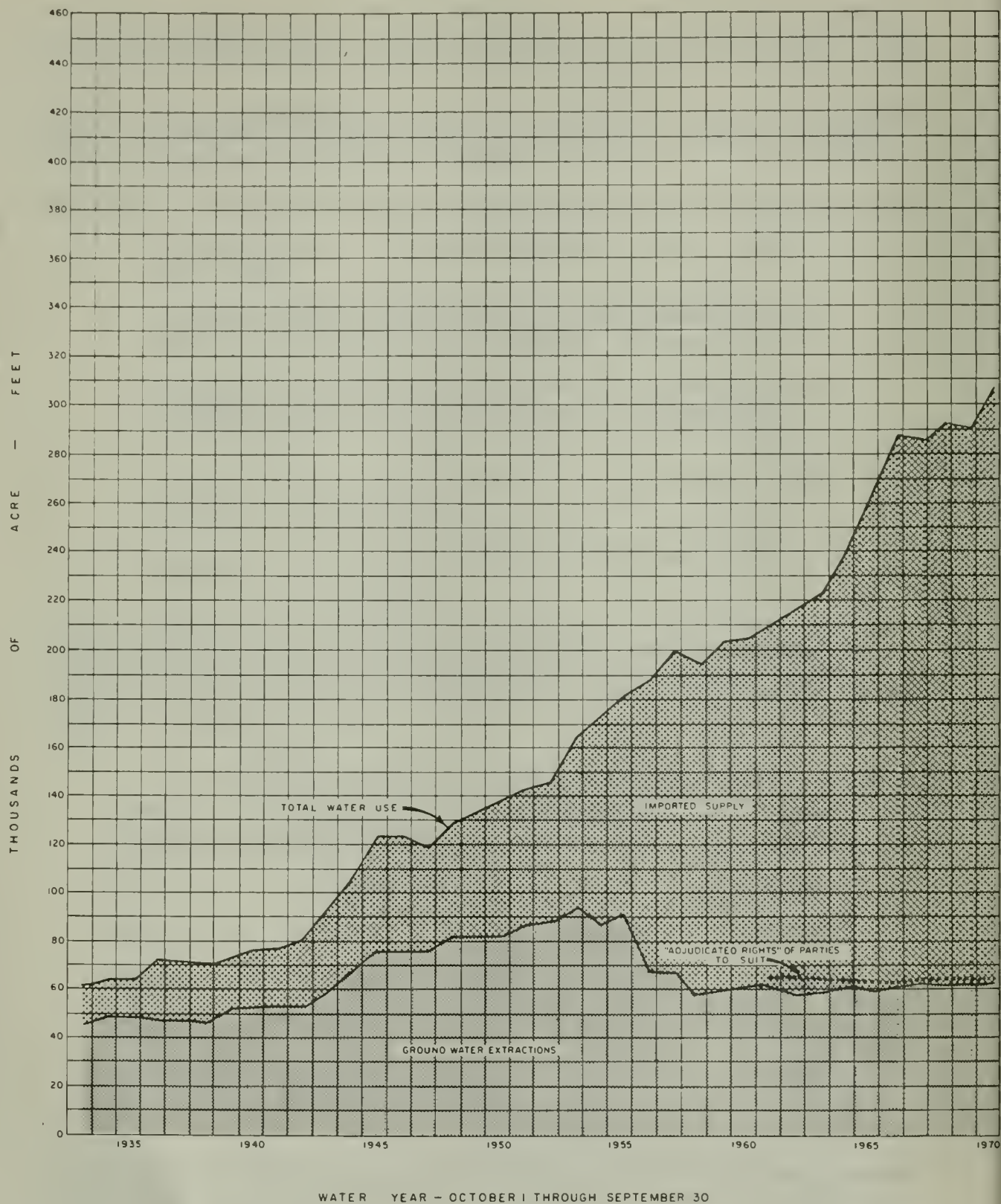


Figure 4 - GROUND WATER EXTRACTIONS AND TOTAL WATER USE
BY PARTIES TO WATERMASTER SERVICE

CHAPTER III. WATER USE

In the year 1969-70, water purveyors in the West Coast Basin served more than 319,000 acre-feet of water to their customers. This represents a 28,000 acre-foot rise in water use when compared to the prior water year.

A rapid population increase in the West Coast Basin area has caused the water demand to increase substantially since 1943. Between 1943 and 1955, ground water from the West Coast Basin served most of the demand. However, the Judgment reduced extraction to about 60,000 acre-feet annually, so imported water rapidly became the largest component of the water supply used in the basin.

Figure 4 graphically illustrates the annual ground water extraction and total water use from 1933 to the present. Much of the increased demand since 1963-64 may be attributed to the barrier project. However, the West Basin Barrier was completed in 1968, and the water demand for that purpose has leveled off and stabilized as depicted by the graph.

Figure 5 provides another graphical analysis of the monthly relationship between rainfall, ground water extractions, and imported supplies. It is quite obvious that climatic conditions play an important role in water demand.

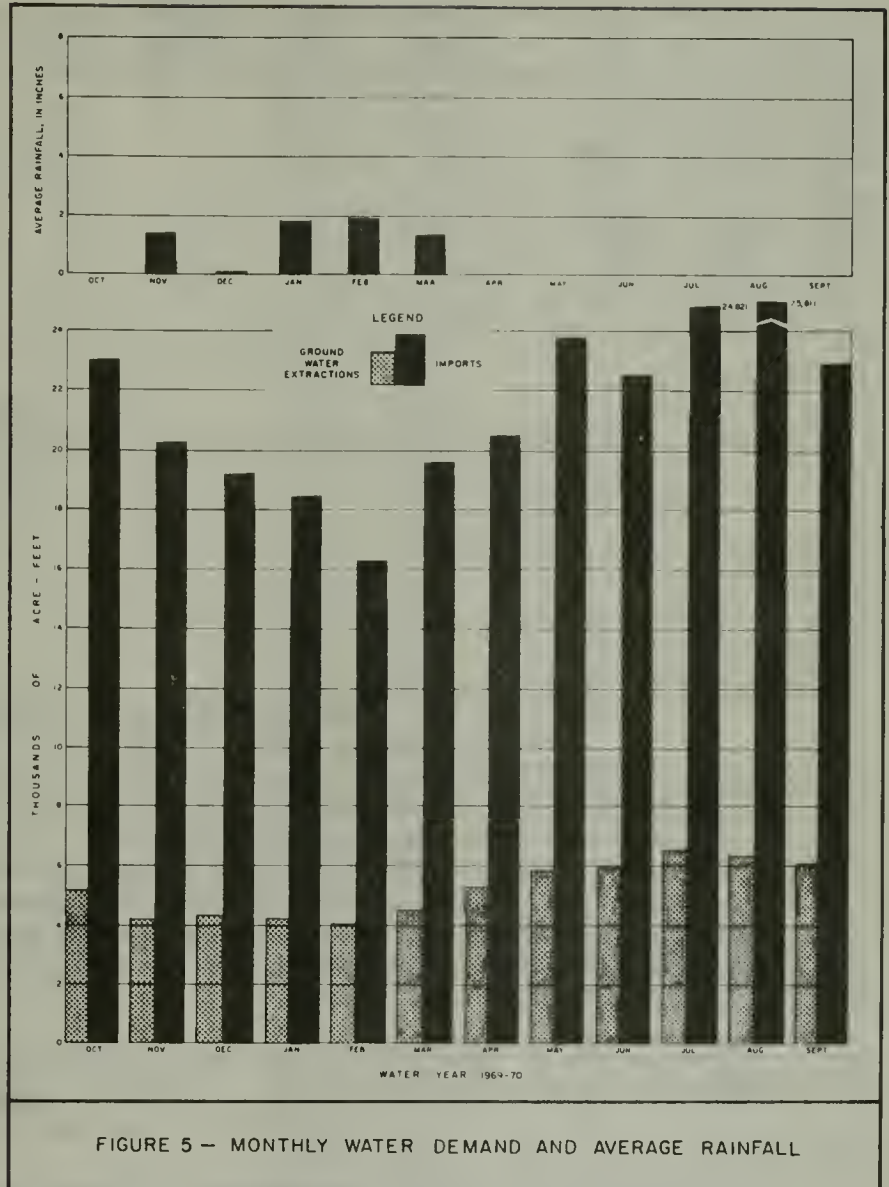


FIGURE 5 - MONTHLY WATER DEMAND AND AVERAGE RAINFALL

DEPARTMENT OF WATER RESOURCES, SOUTHERN DISTRICT, 1970

TABLE 4
ADJUDICATED RIGHTS AND AMOUNT OF WATER PUMPED AND EXCHANGED
In acre-feet

Party	(1) Adjudicated Right	(2) Allowable Carryover from 1968-69	(3) Exchange water purchased (+) or sold (-)	(4) Net leases ^{a/}	(5) Allowable extraction (1)-(2)-(3)-(4)-(5)	(6) Amount pumped	(7) Balance (5)-(6)+7	(8) Allowable Carryover into 1970-71
AB Nursery, Incorporated	22.10 ^{a/}	+ 1.58	+ 6.00		29.68	34.12	- 4.44	- 4.44
American Plant Growers, Incorporated	10.00	+ 15.03 ^{b/}			25.03	28.45	- 3.42	- 3.42
Asehi Fancy Koi, Incorporated ^{b/}	2.00	+ 2.00		+ 12.10	16.10	0.00	+ 16.10	+ 2.00
Associated Southern Investment Company	46.70	0.00		- 46.70	0.00	0.00	0.00	0.00
Atlantic Richfield Company	4,428.00	+ 118.69		+ 6,703.00	11,249.69	10,966.97	+ 288.72	+ 288.72
Ballman, Frank, Estate of	7.00	0.00	- 7.00	0.00	0.00	0.00	+ 0.00	0.00
Boise Water Supply Company ^{a/}	16.92	0.00		-	16.92	0.00	+ 16.92	+ 2.00
California Water Service Company	3,071.00	+ 307.10			3,378.10	2,171.25	+ 1,206.87	+ 0.10
Carlson-Madison Company	104.00	0.00		- 104.00	0.00	0.00	0.00	0.00
Chandler's Palms Verdees and Gravel Corporation	29.20	+ 17.12	+ 125.00		16.62	313.92	+ 90.70	+ 29.22
Coast Forest Products	3.40	+ 2.00			5.40	0.00	+ 5.40	+ 2.00
Columbia Broadcasting System, Incorporated	9.50	0.00		- 9.50	0.00	0.00	0.00	0.00
Durkin, Ken W.	0.30	+ 0.30			0.72	0.00	+ 0.72	+ 0.72
Delaney, Golda, Estate of	4.10	+ 2.00			6.10	0.00	+ 6.10	+ 2.00
Desser Enterprises	0.00	+ 3.27 ^{c/}	+ 2.00		5.27	0.22	+ 5.05	+ 5.05 ^{c/}
Dominquez Water Corporation	10,150.60 ^{a/}	+ 504.88		- 1,096.30	9,559.23	10,174.32	- 615.09	- 615.09
El Segundo, City of	953.00	0.00		- 953.00	0.00	0.00	0.00	0.00
Engelma, Jake	12.10 ^{a/}	0.00		- 12.10	0.00	0.00	0.00	0.00
Etcheberry, Marlene, Estate of	8.20	+ 2.00		- 10.20	0.00	0.00	0.00	0.00
Fletcher Oil and Refining Company	86.30	- 2.99			83.31	66.42	+ 16.89	+ 8.63
Fletcher, Robert G., Daniel G. and Wilfred D. ^{a/}	3.70	0.00		- 3.70	0.00	0.00	0.00	0.00
Fujimoto, Samuel R. & Raymond C.	20.00	+ 2.00			22.00	8.00	+ 13.94	+ 2.00
Gillingham, Florence R., et al.	2.40	0.00	- 2.40		0.00	0.00	0.00	0.00
Gonzales, Felipe	34.30	0.00		- 34.30	0.00	0.00	0.00	0.00
Grent, John, Estate of	59.00	0.00			59.00	0.00	+ 59.00	+ 5.90
Harris Tea, Incorporated	0.70	+ 0.70			1.40	0.00	+ 1.40	+ 1.40
Hawthorne, City of	1,882.00	+ 15.10			1,897.10	1,884.52	+ 12.64	+ 12.40
Hillside Memorial Park	29.20	+ 2.92	+ 37.00		69.12	87.31	- 18.09	- 18.09
Hollywood Golf Club	282.00	- 28.20			310.20	299.52	+ 10.68	+ 10.68
Industrial Chemical Division, Allied Chemical Corporation	255.00 ^{a/}	+ 25.50			280.50	220.64	+ 59.86	+ 25.50
Inglewood, City of	4,385.17 ^{a/}	+ 79.42		- 600.00	3,864.59	3,795.59 ^{d/}	+ 69.00	+ 69.00
Inose, Kenichi	5.40	+ 2.12 ^{c/}	+ 2.00	+ 2.20	11.72	17.64	- 5.92	- 5.92
Ishibashi, Ed	0.00	+ 16.44	+ 40.00		23.50	39.62	- 16.00	- 16.00
Johns-Manville Products Corporation	881.00 ^{a/}	+ 86.32			967.32	986.70	- 19.38	- 19.38
Joughin-Torrance Ranch	3.33 ^{a/}	+ 2.03			5.36	0.00	+ 5.36	+ 2.00
Lagerlof, Stanley C. ^{a/}	3.50	+ 2.00			5.50	0.00	+ 5.50	+ 2.00
Lermans, Alfred	0.70	+ 0.70			1.40	0.00	+ 1.40	+ 1.40
Leuzinger, Emma L.	1.40	+ 1.40			2.80	0.00	+ 2.80	+ 2.00
Long Beach, City of	0.70	+ 0.70			1.40	0.00	+ 1.40	+ 1.40
Lopez, Frank	3.70	+ 2.00			5.70	0.00	+ 5.70	+ 2.00
Los Angeles, City of	1,503.00	- 0.32	+ 1,000.00		2,502.68	2,352.95	+ 149.73	+ 149.73
Los Angeles County-Alondra Park	67.70	0.00			67.70	618.17	- 550.47 ^{e/}	0.00
Los Angeles County Sanitation District No. 2	102.00	+ 2.11			104.11	99.28	+ 4.73	+ 4.73
Los Angeles County Waterworks District No. 13	1,352.00	+ 135.20		- 400.00	1,087.20	13.03	+ 1,074.17 ^{f/}	+ 95.20
Los Angeles County Waterworks District No. 22	551.00	0.00			551.00	125.09	+ 425.91 ^{f/}	+ 55.10
Los Angeles County-Western Avenue Golf Course	29.60	+ 29.60			325.60	248.78	+ 76.82 ^{f/}	+ 29.60
Loyola University of Los Angeles	48.10	0.00			48.10	0.00	+ 48.10	+ 4.81
Manhattan Beach, City of	1,131.20	+ 0.42		- 1,100.00	30.78	30.57	+ 0.21	+ 0.21
Mayflower Nurseries	0.00	+ 3.83 ^{c/}	+ 8.00		11.83	3.70	+ 8.13	+ 8.13 ^{c/}
McDonnell Douglas Corporation	1.70	+ 1.70			3.40	0.04	+ 3.36	+ 2.00
Mobil Oil Corporation	2,570.00	+ 4.20		+ 1,590.00	4,164.20	4,085.73	+ 78.47	+ 78.47
Mori, Roy H. and Kenji	5.60	+ 2.00			7.60	0.00	+ 7.60	+ 2.00
Northrop Corporation, Aircraft Division	38.15	+ 3.82			41.97	0.00	+ 41.97	+ 3.82
Otani, Chisato	0.00	+ 4.86	+ 70.00	+ 7.37	72.51	72.51	0.00	0.00
Pacific Great Cemetery Company	39.40	+ 3.94	+ 4.00		43.34	31.42	+ 11.92	+ 3.94 ^{c/}
Palos Verdees Begonia Farm	0.00	+ 1.29 ^{c/}			5.29	2.46	+ 2.83	+ 2.83 ^{c/}
Palos Verdees Water Company	999.00	0.00		- 999.00	0.00	0.00	0.00	0.00
Park Water Company	160.00	+ 9.84	+ 128.00		297.84	322.65	- 24.81	- 24.81
Phillips Petroleum Company	167.00	+ 16.70	- 163.00		0.70	0.00	+ 0.70	+ 0.70
Rehor, Josephine P.	2.20	0.00		- 2.20	0.00	0.00	0.00	0.00
Rockwell, Michael L.	0.10	+ 0.10			0.70	0.00	+ 0.20	+ 0.20
Roman Catholic Archbishop of Los Angeles	72.30	+ 0.40	+ 52.00		174.70	124.22	+ 0.48	+ 0.48
Santa Fe Land Improvement Company	39.50	0.00		- 39.50	0.00	0.00	0.00	0.00
Sheets, Esther M.	5.50	+ 2.00			7.50	1.27	+ 6.23	+ 2.00
Shell Oil Company	4,516.00	- 17.00			4,499.00	4,130.18	+ 368.82	+ 368.82
Shinoda Brothers, Incorporated	22.50	+ 2.25			24.75	15.60	+ 9.15	+ 2.25
Southern California Edison Company	10.40	+ 2.71		+ 39.33	52.44	6.99	+ 44.45	+ 4.97
Southern California Water Company	6,548.64	+ 0.85		- 90.00	6,459.49	6,459.17	+ 0.32	+ 0.32
Spanish American Institute	44.40	+ 4.44			48.84	13.44	+ 35.40	+ 4.44
Sparkletta Drinking Water Corporation	152.60	+ 15.26			167.86	106.23	+ 61.63	+ 15.26
Standard Oil Company of California	4,601.30	- 28.76		- 4,000.00	572.54	491.36	+ 81.18	+ 60.13

TABLE 4
ADJUDICATED RIGHTS AND AMOUNT OF WATER PUMPED AND EXCHANGED
In acre-feet
(continued)

Party	(1) Adjudicated Right	(2) Allowable carryover from 1967-68	(3) Exchange water purchased (+) or sold (-)	(4) Net Leases ^{a/}	(5) Allowable extraction (1)±(2)±(3)±(4)-(5)	(6) Amount pumped	(7) Balance (5)-(6)-7	(8) Allowable carryover into 1969-70
Stauffer Chemical Company	521.00	+ 52.10			573.10	193.98	+ 379.12	+ 52.10
Superior Oil Company	26.40	+ 2.64			29.04	0.00	+ 29.04	+ 2.64
Texaco, Incorporated	3,432.00 ^{b/}	+ 446.90		+ 1,037.00	4,915.90	4,498.46	+ 417.44	+ 417.44
Torrance, City of	3,804.73 ^{c/}	- 24.36		+ 9.50	3,789.87	3,822.60	- 32.73	- 32.73
Unico Nursery, Incorporated	4.70	+ 2.07 ^{d/}	+ 10.00		16.77	16.16	+ 0.61	+ 0.61
Unico Oil Company of California	2,670.00	+ 150.93		- 900.00	1,920.93	1,907.03	+ 13.90	+ 13.90
United States Steel Corporation	1,791.00 ^{e/}	+ 8.47	- 315.60		1,483.87	1,408.63	+ 75.24	+ 75.24
Watson Land Company	80.20 ^{f/}	+ 4.26			84.46	93.49	- 9.03	- 9.03
Wiesburn School District	8.20	+ 2.00			10.20	0.00	+ 10.20	+ 2.00
Ziegler, Maxwell T.	0.00	- 1.61	+ 24.00		22.39	32.86	- 10.47	- 10.47
TOTALS	64,468.25	+2,042.35	0.00	0.00	66,510.60	62,447.30	+ 4,063.30	+1,490.01

^{a/} See Table 8 for explanation of leased or purchased water right entitlements and new parties.

^{b/} Includes 13.03 acre-feet of Exchange Pool water.

^{c/} Entire amount is Exchange Pool water.

^{d/} Includes 39.46 acre-feet extracted by Inglewood Golf Course.

^{e/} Includes 0.12 acre-feet of Exchange Pool water.

^{f/} Extractions by Los Angeles County; Alondra Park; Waterworks District Nos. 13 and 22; and Western Avenue Golf Course are covered by an equivalent water right in an exchange pool. All three water rights are combined and any remainder is divided between the waterworks districts in proportion to water right.

^{g/} Includes 0.07 acre-feet of Exchange Pool water.

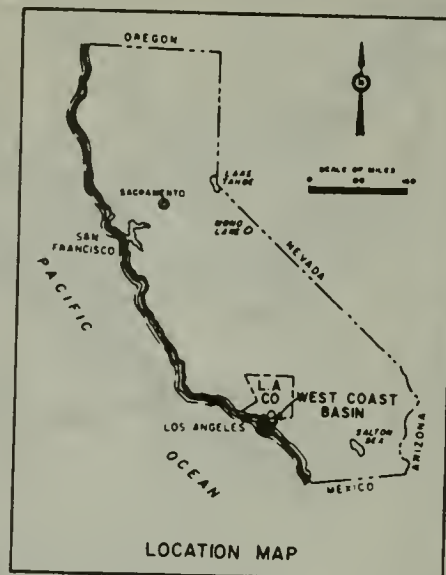
Ground Water Extractions

The West Coast Basin Judgment limits the amount of ground water that each party can extract annually from the Basin or release to the Exchange Pool for pumping by other parties. Recipients of exchange water may pump the amount released to them in addition to their Adjudicated Right. Table 4 is a balance sheet summarizing each party's "water account" by listing each party's Adjudicated Right (see Appendix A for any changes), carryover, exchange pool transaction, and ground water extraction during the 1969-70 water year.

The metered ground water production from each active well in the Basin is listed by party in Appendix B, Table B-1. This tabulation shows the total ground water production as reported by each party.

A report on the gross water supply of all parties appears in Table B-2 of Appendix B. The gross water supply includes all sources of water supply necessary to provide each party's total water requirement for its service area, as shown on Plates 5 and 6.





LIST OF MUNICIPAL, MUTUAL AND PUBLIC UTILITY
WATER SERVICE AGENCIES

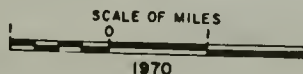
Area number	Entity	Location on plate
1	California - American Water Company (Nonparty)	B- 2
1-A	California Water Service Company	F- 5
2	Dominguez Water Corporation	C- 8
3	El Segundo, City of	D- 3
4	Hawthorne, City of	C- 4
5	Inglewood, City of	A- 3
6	Long Beach, City of	C-11
7	Los Angeles, City of	E- 9
8	Los Angeles County Waterworks District No. 13	E- 8
9	Los Angeles County Waterworks District No. 22	C- 4
9-A	Los Angeles County Waterworks District No. 26 (Nonparty)	E- 3
10	Manhattan Beach, City of	E- 4
11	Palo Verde Water Company	G- 8
12	Park Water Company	C- 5
12-A	Signal Hill, City of (Nonparty)	B-11
13	Southern California Water Company	B- 5
14	Torrance, City of	E- 7

LEGEND

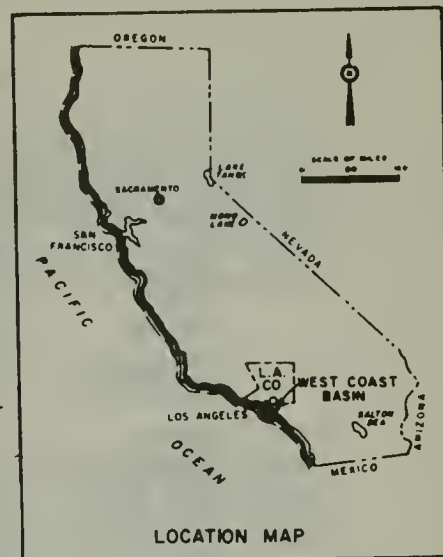
..... DISTRIBUTION SYSTEM OF THE METROPOLITAN
WATER DISTRICT OF SOUTHERN CALIFORNIA
— BASIN BOUNDARY

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
WEST COAST BASIN WATERMASTER SERVICE

WATER SERVICE AREAS OF
MUNICIPAL, MUTUAL AND PUBLIC UTILITY
WATER SERVICE AGENCIES
SEPTEMBER 1970







INDEX

WATER SERVICE AREA OF INDIVIDUAL PRODUCERS

Area number	Entity	Location on plate	Area number	Entity	Location on plate
1	ABC Nursery, Incorporated	8-7	38	Loyola University of Los Angeles	C 1
2	American Plant Growers, Incorporated	D-8	39	Mayflower Nurseries	C-6 7
2A	Asahi Fancy Koi, Incorporated	-	40	McDonnell Douglas Corporation	D-6
3	Associated Southern Investment Company	D-6	41	McFadden, John K. (nonparty)	8-6
4	Atlantic Richfield Company	C-9	42	Mobil Oil Corporation	D-6
5	Ballman, Frank A. and Rosemary N.	8-2	43	Mori, Roy H. and Kanji	C-6
6	Boise Cascade Building Company	E-7	45	Northrop Corporation, Aircraft Division	C-4
7	Carson-Medrona Company	E-6	46	Otani, Chisato	D 5
8	Chandler's Palos Verdes Sand & Gravel Corporation	F 4	47	Pacific Coast Cemetery Company	D-5
9	Coast Forest Products	8 8	48	Palos Verdes Begonia Farm	F-6
10	Columbia Broadcasting Systems, Incorporated	D-5	49	Pet Haven Cemetery (nonparty)	C-7
11	Cost, Edward (nonparty)	C-7	50	Phillips Petroleum Company	D-9
12	Curtis, Owen W.	8-6	51	Pioneer Paper Stock (nonparty)	C-6
13	Delaney, Golda, Estate of	D-8	52	Rehor, Josephine P.	8-6
14A	Dasser Enterprises	C-9	53	Rockwell, Michael L.	8-6
14B	Engelma, Jake	-	54	Roman Catholic Archbishop of Los Angeles	8-1
15	Etchemendy, Caroline, Estate of	C-7	55	Santa Fe Land Improvement Company	D-4
16	Fletcher Oil and Refining Company	D-8	56	Sheets, Esther M.	C 7
17	Fletcher, Robert, et al.	D-8	57	Shall Oil Company	C-8, D 9
18	Fujimoto, Samuel R. and Raymond S.	8-6	57A	Shinoda Brothers, Incorporated	D-6
19	Gillingham, Florence R. et al.	8-4	58	Southern California Edison Company	8 9 D-5 10
20	Gonzales, Felipe and Gabriela	D-5	58	Spanish American Institute	8-8
21	Grant, John, Estate of	8-7	80	Sparklets Drinking Water Corporation	8 6
22	Harris Tube, Incorporated	8-7	61	Standard Oil Company of California	D-3
23	Hillside Memorial Park	8-2	62	Standard Oil Company of California	G 2
24	Hollywood Turf Club	8-3		Leasee on Isabella J. Granz Estate	
25	Industrial Chemical Division, Allied Chemical Corp.	D-3	63	Stauffer Chemical Company	C 8, 9
26	Inoue, Kanichi	8-7	64	Superior Oil Company, Leasee on Isabella J. Granz Estate	G-2
28	Ishibashi, Aki	D-8	65	Taxaco, Incorporated	D-9
29	Johns-Manville Products Corporation	C-9	67	Three Star Nursery Inc. (nonparty)	D 5
30	Joughin Torrance Ranch	E-7, 8	68	Union Nursery Incorporated	8-7
31	Lagerlof, Stanley C.	-	69	Union Oil Company of California	E-9
32	Lemmens, Alfred	E-8	70	United States Steel Corporation	D-8
33	Leuzinger, Emma L.	C 3	71	Watson Land Company	8 9, C-0, D 9
34	Lopez, Frank	C-6	73	Wisebum School District	D 4
35	Los Angeles County Alondra Park	D 5	74	Ziegler Maxwell	C-6
36	Los Angeles County Sanitation District No. 2	E-8			
37	Los Angeles County Western Avenue Golf Course	8-5			
37A	Los Angeles County Western Avenue Golf Course				

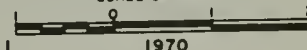
*No service area

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
WEST COAST BASIN WATERMASTER SERVICE
WATER SERVICE AREAS OF
INDIVIDUAL PRODUCERS
SEPTEMBER 1970

LEGEND

- DISTRIBUTION SYSTEM OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
- BASIN BOUNDARY

SCALE OF MILES



1970

Extractions by Nonparties and
Parties with no Adjudicated Right

Several nonparties and parties with zero Adjudicated Rights pump water from the West Coast Basin. Parties with a zero water right have abided by the Judgment by offsetting their extractions with Exchange Pool water purchases. The extraction each pumper reported to the Central and West Basin Water Replenishment District was:

<u>Pumper</u>	<u>State Well No.</u>	<u>Amount pumped, in acre-feet</u>
Cost, Edward	3S/13W-30Q1	0.30
Desser Enterprises*	4S/13W-15Q1	0.22
Ishibashi, Aki*	4S/14W-24A1	39.62
Mayflower Nurseries*	3S/14W-25K6	1.04
" "	3S/13W-31B7	<u>2.66</u>
		3.70
McFadden, John K.	3S/13W-19K2	0.68
Otani, Chisato*	3S/14W-33N4	26.85
" "	3S/14W-33R4	<u>45.66</u>
		72.51
Palos Verdes Begonia Farm*	4S/14W-21N1	2.46
Pioneer Paper Stock Company	3S/13W-31C2	2.52
Three Star Nursery	3S/14W-33R3	6.37
Ziegler, Maxwell T.*	3S/13W-31M1	<u>32.86</u>
TOTAL		161.24

*Parties to the Judgment, shown in Table 4.

Imported Supplies

Earlier it was noted that large quantities of water are imported to the West Coast Basin from other sources. Water from the Colorado River arrives through the facilities of the Metropolitan Water District of Southern California, for distribution by the Cities of Long Beach, Los Angeles, Torrance, and the West Basin Municipal Water District. The City of Los Angeles also imports water from the Owens River-Mono Basin in east Central California. The Dominguez Water Corporation, the City of Long Beach, and the Southern California Water Company import ground water from the Central Basin to supplement other supplies.

All imports to the West Coast Basin, with the exception of imports by two nonparties, are listed in Table 5. The California-American Water Company and City of Signal Hill, both nonparties, imported 3,169 and 915 acre-feet, respectively.

TABLE 5

QUANTITY OF IMPORTED WATER

Entity Importing Water	:	Source :	Imported supply, in acre-feet	
			1968-69	1969-70
Dominguez Water Corporation	1		3,373	3,962
Long Beach, City of	2		32,153	32,463
Los Angeles, City of	4		53,398	58,844
Southern California Water Company	1		979	1,000
Torrance, City of	3		19,555	20,388
West Basin Municipal Water District	3			
California Water Service Company			10,447	11,932
Dominguez Water Corporation			17,192	17,017
El Segundo, City of			14,993	20,751
Hawthorne, City of			3,510	3,966
Inglewood, City of			7,930	9,286
L. A. County Waterworks				
District No. 13			1,861	2,593
L. A. County Waterworks				
District No. 22			888	1,685
Manhattan Beach, City of			5,383	6,077
Palos Verdes Water Company			11,699	15,360
Southern California Water Company			20,499	22,228
L. A. County Flood Control District			<u>36,416*</u>	<u>29,461*</u>
TOTALS			240,276	257,013

Sources of Imported Water	:	Desig- nation :	1968-69	:	1969-70
Central Basin Ground Water	1		4,352		4,962
Central Basin Ground Water and					
Colorado River Water	2		32,153		32,463
Colorado River Water	3		150,373		160,744
Owens River-Mono Basin Water and					
Colorado River Water	4		<u>53,398</u>		<u>58,844</u>
TOTALS			240,276		257,013

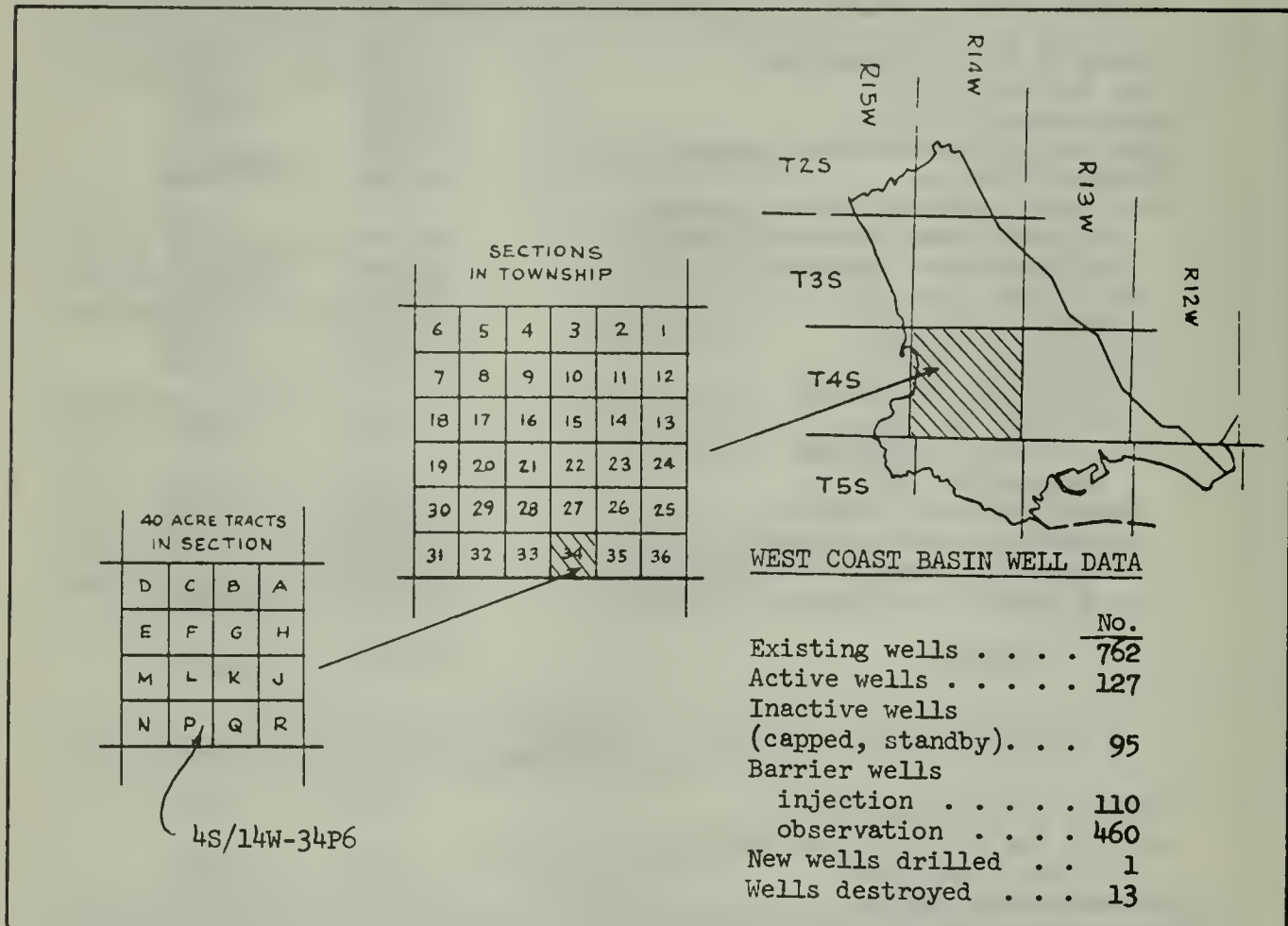
*Delivered to Los Angeles County Flood Control District by the City of El Segundo for use in the West Coast Basin Barrier Project.

Exported Supplies

Exports from the West Coast Basin are small. The City of Inglewood exported 3,482 acre-feet of ground water and Colorado River water to the Central Basin. The City of Los Angeles exported 1,451 acre-feet and the Palos Verdes Water Company exported 8,767 acre-feet of ground water and Colorado River water to portions of their service areas lying west of the Palos Verdes Hills (see Plate 5).

Water Wells in the West Coast Basin

Each water well in the West Coast Basin is assigned a state well number to simplify locating the well. The state well numbering system was adopted several years ago from the United States Public Land Survey System. A graphical illustration of the system in the West Coast Basin is shown below.



Each state well number consists of a township, range, and section number; a letter to indicate the 40-acre plot where the well is located; a number to identify the particular well in a section; and the letter "S" indicating that the well is referenced to the San Bernardino Base and Meridian.

For instance, state well number 4S/14W-34P6S would be the sixth well assigned a number in Township 4 South, Range 14 West, 40-acre Tract "P" in Section 34. All wells in Los Angeles County are referenced to the San Bernardino Base and Meridian, so the letter "S" is dropped in this report.

As a matter of course, the Watermaster locates all new wells by surveying them in and assigning new state well numbers. If a well is suspected of being abandoned or destroyed, the Watermaster tags the well, requesting that the owner inform the Watermaster of his intentions. In this manner, the owner may be informed of the proper methods of destroying a well.

CHAPTER IV. ADMINISTRATION OF THE JUDGMENT

The West Coast Basin Judgment was a logical step toward preserving the usefulness of a valuable resource. It provides a flexible tool to limit extractions and still allow a beneficial use of the ground water supply. However, the restrictions on extractions imposed by the Judgment forces the parties to look for other supplies. Fortunately, other sources of water are available. If they were not, the rapidly increasing demand for water might literally bankrupt the basin before other basin management techniques could be developed.

Exchange Pool

The Court and parties foresaw that adjudicating the water rights in the West Coast Basin, and limiting the total extractions within the basin, would not be satisfactory to all parties. As a consequence, Paragraph VII of the Judgment was written authorizing a water Exchange Pool to provide additional water rights to members without supplementary water. Membership in the Exchange Pool is voluntary, and any party can join by filing an "Intention to be Bound by Paragraph VII of the Judgment" with the Watermaster and the Court.

Once each year, during the month of July, the Watermaster opens the Exchange Pool to permit an inter-member water right exchange in accordance with the Judgment. Tables 6 and 7 summarize last year's Exchange Pool transactions.

TABLE 6

EXCHANGE POOL REQUESTS

Party	: Amount of water received, : : in acre-feet	: Cost of : exchange water ^{a/}
ABC Nursery, Incorporated	6.00	\$ 81.02
Chandlers Palos Verdes Sand and Gravel Company	125.00	1,687.94
Desser Enterprises	2.00	27.01
Hillside Memorial Park	37.00	499.63
Inose, Kenichi	2.00	27.01
Ishibashi, Aki	40.00	540.14
Mayflower Nurseries	8.00	108.03
Otani, Chisato	70.00	945.24
Palos Verdes Begonia Farm	4.00	54.01
Park Water Company	128.00	1,728.45
Roman Catholic Archbishop of Los Angeles	52.00	702.19
Union Nursery, Incorporated	10.00	135.04
Ziegler, Maxwell T.	24.00	324.09
 TOTALS	 508.00	 \$ 6,859.80

^{a/} Cost at \$13.5036 per acre-foot.

TABLE 7

EXCHANGE POOL OFFERS

Party	: Amount, in acre-feet	: Price, per	: Charge for
	: Offered	: Released	: acre-foot : exchange water
<u>Mandatory Offers</u>			
Phillips Petroleum Company	183.00	183.00	\$ 11.00 \$ 2,013.00
Ballman, Frank A., Estate of	7.00	7.00	12.00 84.00
Gillingham, Florence R. et al.	2.40	2.40	12.00 28.80
United States Steel Corporation	985.00	315.60	15.00 4,734.00
Inglewood, City of	266.80	0	45.30 --
Shell Oil Company	116.00	0	57.26 --
Stauffer Chemical Company	129.00	0	60.98 ^{a/} --
Los Angeles County Sanitation District No. 2	9.90	0	79.05 ^{a/} --
TOTALS	1,699.10	508.00	\$ 6,859.80
<u>Voluntary Offers</u>			
California Water Service Company	850.00	0	\$ 31.30 --
El Segundo, City of	953.00	0	35.58 --
Harris Tube, Incorporated	2.70	0	43.00 --
Standard Oil Company of California	821.58	0	92.55 ^{a/} --
Wiseburn School District	8.20	0	20.00 --
TOTALS	2,635.48		

^{a/} Cost assuming all of the offered water was sold.

In essence, the Exchange Pool is placed into operation when the Watermaster mails a form on July 1 of each year requesting that each member estimate his water requirement and supply for the approaching water year. If a member has a supplemental supply and if his total supply, including supplemental water, exceeds his estimated requirement, the member must make a Mandatory Offer to lease a portion of his pumping right. The Mandatory Offer should be the difference between his Adjudicated Right and one-half his estimated requirement. Under no circumstance, however, can the Mandatory Offer plus the estimated requirement exceed the total supply. Therefore, the Mandatory Offer must be limited to an amount which can be replaced with supplemental water.

There is another type of offer called the Voluntary Offer. Any member may voluntarily offer pumping rights to the Exchange Pool if his water supply exceeds his estimated requirement and no supplementary supply is available. However, the Watermaster must allocate all of the Mandatory Offers before using the Voluntary Offers. Hence, Voluntary Offers have not been used for several years.

The price a member may charge for a Mandatory Offer cannot exceed the cost per acre-foot of replacement water. The price for Voluntary Offers cannot exceed the price per acre-foot charged by the West Basin Municipal Water District for imported water. The Watermaster determines the amount of water required and computes the average price to be paid for requests.

If a member's estimated water requirement exceeds his total water right, including leases, and he has no supplementary supply, the difference may be requested from the Exchange Pool. The cost per acre-foot is the weighted average price per acre-foot of all the offers which are required to meet requests.

Transfers of Adjudicated Rights

The West Coast Basin Exchange Pool is not the only method of obtaining additional pumping rights. Each year there are several lease and sale transactions between parties. Table 8 lists all leases, sales, parties, and amounts involved. Appendix A contains a copy of the document substantiating each transfer.

Appendix A also contains samples of our recommended lease and sale agreements. Most of the documents received by the Watermaster are unnecessarily complex. The Watermaster recommends that all documents be prepared on 8-1/2 x 11-inch paper. Any necessary additions to the recommended agreement may be attached to another page. You need not use these sample documents, but they are sufficient for most purposes.

The "General Information, Policies and Procedures" of the Watermaster Service in the West Coast Basin is being revised to read as follows:

"In order that a water right lease be in force (applicable) during a particular water year, it must have been executed by the parties involved before or prior to September 1 of the water year in question. In addition, the executed water right lease document should be filed with the Watermaster no later than August 31 or postmarked August 31 of the water year in question. Failure to submit a lease document by August 31 of the water year in question may be considered as evidence that such an agreement was never consummated in such water year."

TABLE 8

TRANSFERS OF ADJUDICATED RIGHTS

Party	:	Transaction and Amount, in acre-feet	:	Party
ABC Nursery, Incorporated		purchased 1.80	from	Jenkins, Harry C.
Asahi Fancy Koi, Incorporated		purchased 2.00	from	Engelsma, Jake
		leased 12.10	"	Engelsma, Jake
Associated Southern Investment Company		leased 46.70	to	Southern California Edison Company
Atlantic Richfield Company		leased 1250.00	from	Dominguez Water Corporation
		" 953.00	"	El Segundo, City of
		" 1100.00	"	Manhattan Beach, City of
		" 2500.00	"	Standard Oil Company of California
		" 900.00	"	Union Oil Company of California
Boise Cascade Building Company		purchased 16.92	from	Joughin Torrance Ranch
Carson-Madrone Company		leased 104.00	to	Dominguez Water Corporation
Columbia Broadcasting System, Inc.		leased 9.50	to	Torrance, City of
Dominguez Water Corporation		sold 37.60	to	Watson Land Company
		leased 1250.00	to	Atlantic Richfield Company
		" 104.00	from	Carson-Madrone Company
		" 10.20	"	Etchemendy, Caroline, Estate of
		" 39.50	"	Santa Fe Land Improvement Company
El Segundo, City of		leased 953.00	to	Atlantic Richfield Company
Engelsma, Jake		sold 2.00	to	Asahi Fancy Koi, Incorporated
		leased 12.10	"	Asahi Fancy Koi, Incorporated
Etchemendy, Caroline, Estate of		leased 10.20	to	Dominguez Water Corporation
Flesch, Leslie R. and Andor Pasternak, et al.		sold 3.50	to	Lagerlof, Stanley C.
Fletcher, Robert G., et al.		purchased 3.70	from	Jungquist, Fred A.
Gonzales, Felipe		leased 34.30	to	Texaco, Incorporated
Inglewood, City of		purchased 1.37	from	Murdock, George R., Estate of
		leased 600.00	to	Los Angeles, City of
Inose, Kenichi		leased 2.20	from	Rehor, Josephine P.
Jenkins, Harry C.		sold 1.80	to	ABC Nursery, Incorporated
Joughin Torrance Ranch		sold 16.92	to	Boise Cascade Building Company
Jungquist, Fred A.		leased 3.70	to	Texaco, Incorporated
		sold 3.70	to	Fletcher, Robert G. et al.
Lagerlof, Stanley C.		purchased 3.50	from	Flesch, Leslie R. & Andor Pasternak, et al.
Los Angeles, City of		leased 600.00	from	Inglewood, City of
		" 400.00	"	Los Angeles County Waterworks District #13
Los Angeles County Waterworks District #13		leased 400.00	to	Los Angeles, City of
Manhattan Beach, City of		leased 1100.00	to	Atlantic Richfield Company
Mobil Oil Corporation		leased 90.00	from	Southern California Water Company
		" 1500.00	"	Standard Oil Company of California
Moran, Ronald E.		sold 9.00	to	Torrance, City of
Murdock, George R., Estate of		sold 1.37	to	Inglewood, City of
Otani, Chisato		leased 7.37	from	Southern California Edison Company
Palos Verdes Water Company		leased 999.00	to	Texaco, Incorporated
Rehor, Josephine P.		leased 2.20	to	Inose, Kenichi
Santa Fe Land Improvement Company		leased 39.50	to	Dominguez Water Corporation
Southern California Edison Company		leased 46.70	from	Associated Southern Investment Company
		" 7.37	to	Otani, Chisato
Southern California Water Company		leased 90.00	to	Mobil Oil Corporation
Standard Oil Company of California		leased 2500.00	to	Atlantic Richfield Company
		" 1500.00	"	Mobil Oil Corporation
Texaco, Incorporated		leased 34.30	from	Gonzales, Felipe
		" 3.70	"	Jungquist, Fred A.
		" 999.00	"	Palos Verdes Water Company
Torrance, City of		purchased 9.00	from	Moran, Ronald E.
		leased 9.50	"	Columbia Broadcasting System, Incorporated
Union Oil Company of California		leased 900.00	to	Atlantic Richfield Company
Watson Land Company		purchased 37.60	from	Dominguez Water Corporation

Overextractions

Each year some parties extract more water from the West Coast Basin than they are entitled to. The overextractions are usually small, within the tolerance set by the Judgment. The Judgment allows each party to overextract by 2 acre-feet or 10 percent of its Adjudicated Right, on the premise that the over-extraction will be eliminated during the following year. Most overextractions are the result of an unexpected increase in water demand so it would be unreasonable not to allow some deviation from the limits and guidelines of the Judgment. Table 9 summarizes all overextractions during the water year 1969-70. Note the totals of columns (4) and (5) which show that the overextractions do not exceed the allowable overextractions.

TABLE 9
OVEREXTRACTIONS
In acre-feet

Party	(1) Adjudicated Right ^a	(2) Allowable ^b Extraction	(3) Amount pumped	(4) Over- extraction : (2)-(3)= ^d	(5) Allowable Over- extraction ^c	(6) Overextraction in percent of Adjudicated Right : (4) ÷ (1) × 100=(6)
ABC Nursery, Incorporated	22.10	29.68	34.12	- 4.44 ^d	2.21	20.10
American Plant Growers, Incorporated	10.00	25.03	28.45	- 3.42 ^d	2.00	34.20
Dominguez Water Corporation	9,054.35	9,559.23	10,174.32	- 615.09 ^d	905.44	6.79
Hillside Memorial Park	29.20	69.12	87.21	- 18.09 ^d	2.92	61.95
Inose, Kenichi	7.60	11.72	17.64	- 5.92 ^d	2.00	77.89
Ishibashi, Aki	0.00	23.56	39.62	- 16.06 ^d	2.00	-
Johns-Manville Products Corporation	881.00	967.32	986.70	- 19.38 ^d	88.10	2.20
Park Water Company	160.00	297.81	322.65	- 24.81 ^d	16.00	15.50
Torrance, City of	3,814.23	3,789.87	3,822.60	- 32.73 ^d	380.47	0.86
Watson Land Company	80.20	84.46	93.49	- 9.03 ^d	8.02	11.26
Ziegler, Maxwell T.	0.00	22.39	32.86	- 10.47 ^d	2.00	-
TOTALS	14,058.68	14,880.22	15,639.66	- 759.44	1,411.16	

^a Includes water right leases.

^b See column (5) of Table 4 for derivation.

^c Computed as 2 acre-feet or 10 percent of Adjudicated Right [Column (1)] whichever is larger.

^d In violation of Judgment.

Of the eleven parties overextracting ground water, eight exceeded the limit imposed by the Judgment. Of these eight, six bought Exchange Pool water for the 1970-71 water year to cover their overextractions and the remaining two have been advised by the Watermaster to obtain leased-water-rights for the 1970-71 water year sufficient to make up their overextraction.

In two cases, the parties are farmers having a zero water right and no supplementary water source. To meet their water demands they purchase Exchange Pool water each year.

In view of the difficulty of estimating water needs one year in advance, all the parties concerned have shown good faith by either purchasing Exchange Pool water or have been advised by the Watermaster to obtain leased-water-rights for the 1970-71 water year. The Watermaster recommends no court action be taken at this time on the eight parties exceeding the limit imposed by the Judgment.

CHAPTER V. ADMINISTRATIVE COSTS

Expenses incurred in administering watermaster service areas are payable one-half by the State and one-half by the parties. To obtain the funds required for watermaster service, the Watermaster prepares a tentative budget each year stating the anticipated expense for administering the provisions of the Judgment. A copy of the tentative budget is mailed to each of the parties at least 60 days before the beginning of each water year. If no objections are received within 15 days after service of the tentative budget, it becomes the final budget.

The 1969-70 tentative budget, which was mailed on July 31, 1969, received no objections and became the final budget on August 15, 1969. The final approved budget is presented in Table 10.

TABLE 10

APPROVED BUDGET FOR 1969-70

Salaries and wages	\$28,046
Operating expenses	<u>13,296</u>
TOTAL BUDGET	\$41,342
One-half payable by State	\$20,671
One-half payable by parties	\$20,671
Less carryover from 1968-69	<u>- 2,171</u>
TOTAL AMOUNT TO BE BILLED	\$18,500

The administrative cost chargeable to each party is in proportion to its "Adjudicated Right" and is payable on or prior to the first day of the water year. A five percent penalty is added if charges become delinquent. A total of \$0.85 was collected in penalties for delayed payments. Apportionment of the parties' share of the budget for the 1969-70 water year is set forth in Table 11.

Income and expenditures for watermaster service during the 1969-70 water year are shown in Table 12. Any credit or debit balance is carried forward into the succeeding water year. The parties' share of the 1969-70 carryover amounts to \$10,318.74.

TABLE 11

APPORTIONMENT OF PARTIES' SHARE OF 1969-70 BUDGET

Party	: Adjudicated : : Right, : Apportionment : in acre-feet : Paid
ABC Nursery, Incorporated	20.30 \$ 5.83
American Plant Growers, Incorporated	10.00 2.87 ^{a/}
Associated Southern Investment Company	46.70 13.40
Atlantic Richfield Company	4,428.00 1,270.84
Ballman, Frank A., Estate of	7.00 2.01 ^{a/}
Barclay, Richard and R. A. Watt-Sholda ^{b/}	0.00 0.00 ^{a/}
California Water Service Company	3,071.00 881.38
Carson-Madrona Company	104.00 29.85
Chandler's Palos Verdes Sand and Gravel Corp.	294.20 84.44 ^{a/}
Coast Forest Products	3.40 0.98 ^{a/}
Columbia Broadcasting System, Incorporated	12.50 3.59
Curtis, Owen W.	0.36 0.10 ^{a/}
Delaney, Golda, Estate of	4.10 1.18 ^{a/}
Desser Enterprises	0.00 0.00 ^{a/}
Dominguez Water Corporation	10,188.25 2,924.03
El Segundo, City of	953.00 273.51
Engelsma, Jake	14.10 4.05 ^{a/}
Etchemendy, Caroline, Estate of	8.20 2.35 ^{a/}
Flesch, Leslie R. and Andor Pasternak, et al. ^{b/}	3.50 1.00 ^{a/}
Fletcher Oil and Refining Company	86.30 24.77
Fujimoto, Samuel R. and Raymond S.	20.00 5.74
Gillingham, Florence R., et al.	2.40 0.69 ^{a/}
Gonzales, Felipe	34.30 9.84
Grant, John, Estate of	59.00 16.93 ^{c/}
Harris Tube, Incorporated	0.70 0.20 ^{a/}
Hawthorne, City of	1,882.00 540.13
Hillside Memorial Park	29.20 8.38
Hollywood Turf Club	282.00 80.93
Industrial Chemical Division - Allied Chemical Corporation	255.00 73.19
Inglewood, City of	4,383.80 1,258.15
Inose Kenichi	5.40 1.55 ^{a/}
Ishibashi, Aki ^{b/}	0.00 0.00 ^{a/}
Jenkins, Harry ^{b/}	1.80 0.52 ^{a/}
Johns-Manville Products Corporation	881.00 252.85
Joughin Torrance Ranch	20.25 5.81
Jungquist, Fred A. ^{b/}	3.70 1.06 ^{a/}
Lermens, Alfred	0.70 0.20 ^{a/}
Leuzinger, Emma L.	1.40 0.40 ^{a/}
Long Beach, City of	0.70 0.20 ^{a/}
Lopes, Frank	3.70 1.06 ^{a/}
Los Angeles, City of	1,503.00 431.36
Los Angeles County - Alondra Park	67.70 19.43
Los Angeles County Sanitation District No. 2	102.00 29.27
Los Angeles County Waterworks District No. 13	1,352.00 388.02
Los Angeles County Waterworks District No. 22	551.00 158.14
Los Angeles County-Western Avenue Golf Course	296.00 84.95

APPORTIONMENT OF PARTIES' SHARE OF 1969-70 BUDGET
(continued)

Party	: Adjudicated : : Right, : Apportionment : in acre-feet : Paid
Loyola University of Los Angeles	48.10 \$ 13.80
Manhattan Beach, City of	1,131.20 324.65 ^{a/}
Mayflower Nurseries	0.00 0.00 ^{a/}
McDonnell Douglas Corporation	1.70 0.49 ^{a/}
Mobil Oil Corporation	2,570.00 737.59
Moran, Ronald E. ^{b/}	6.00 1.72 ^{a/}
Mori, Roy H. and Kenji	5.60 1.61 ^{a/}
Murdock, George R. ^{b/}	1.37 0.39 ^{a/}
Northrop Corporation, Aircraft Division	38.15 10.95 ^{a/}
Normandie Park ^{b/}	0.00 0.00 ^{a/}
Otani, Chisato	0.00 0.00 ^{a/}
Pacific Crest Cemetery Company	39.40 11.31
Palos Verdes Begonia Farm	0.00 0.00 ^{a/}
Palos Verdes Water Company	999.00 286.71
Park Water Company	160.00 45.92
Phillips Petroleum Company	167.00 47.93
Rehor, Josephine P.	2.20 0.63 ^{a/}
Rockwell, Michael L.	0.10 0.03 ^{a/}
Roman Catholic Archbishop of Los Angeles	72.30 20.75
Santa Fe Land Improvement Company	39.50 11.34
Sheets, Esther M.	5.50 1.58 ^{a/}
Shell Oil Company	4,516.00 1,296.09
Shinoda Brothers, Incorporated	22.50 6.46
Southern California Edison Company	10.40 2.98 ^{a/}
Southern California Water Company	6,548.64 1,879.46
Spanish American Institute	44.40 12.74
Sparkletts Drinking Water Corporation	152.60 43.80
Standard Oil Company of California	4,601.30 1,320.57
Stauffer Chemical Company	521.00 149.53
Superior Oil Company	26.40 7.58
Texaco, Incorporated	3,432.00 984.98
Torrance, City of	3,795.73 1,089.37 ^{a/}
Union Nursery, Incorporated	4.70 1.35 ^{a/}
Union Oil Company of California	2,670.00 766.29
United States Steel Corporation	1,791.00 514.02
Watson Land Company	42.60 12.23 ^{a/}
Watt, R. A., Incorporated ^{b/}	0.00 0.00 ^{a/}
Wiseburn School District	8.20 2.35 ^{a/}
Ziegler, Maxwell T.	0.00 0.00 ^{a/}
TOTALS	64,468.25 18,502.38 ^{a/}

^{a/} Payment waived on apportionment of less than \$3.00 in accordance with Section 13943.5 of the Government Code. A total of \$29.50 was waived in this manner.

^{b/} Was a party at the time of billing.

^{c/} Delayed payment, penalty assessed. A total of \$.85 was collected in penalties.

TABLE 12

STATEMENT OF 1969-70 INCOME AND EXPENDITURES

Item	:	Parties	:	State	:	Parties and State
<u>Income</u>						
From 1969-70 budget		\$18,472.88		\$20,671.00		\$39,143.88
Balance from 1968-69		9,248.08				9,248.08
From penalties						
Budget		.85				.85
Exchange Pool		1.89				1.89
TOTAL INCOME			\$27,723.70		\$20,671.00	\$48,394.70
<u>Expenditures</u>						
Salaries and wages		\$11,792.21		\$11,792.22		\$23,584.43
Operating expenses						
Miscellaneous indirect cost ^{a/}		2,761.96		2,761.97		5,523.93
Travel in State		168.24		168.24		336.48
Printing annual report		432.60		432.59		865.19
Electronic machine computing		1,709.22		1,709.21		3,418.43
Other ^{b/}		540.73		540.74		1,081.47
TOTAL EXPENDITURES			\$17,404.96		\$17,404.97	\$34,809.93
BALANCE			\$10,318.74 ^{c/}		\$ 3,266.03	\$13,584.77

a/ Rent, utilities, auto rental, communications, retirement, employee's health plan, and workmen's compensation insurance.

b/ Equipment rental, mobile equipment operation, engineering contracts.

c/ Total credit to parties in 1970-71 water year, subject to delayed charges.

A P P E N D I X A

**ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970**

AND

**COPIES OF DOCUMENTS SUBSTANTIATING
TRANSFERS OF ADJUDICATED RIGHT**

APPENDIX A

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ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES SEPTEMBER 1970

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
*ABC Nursery, Incorporated		
Successor to Sidney R. and Charlotte W. Title		
Successor to Keith W. and Opal B. Schlaegel	13.60	
Successor to William and Clara B. Verburg	6.70	
Successor to Harry C. Jenkins	<u>1.80</u>	
		22.10
Abell, Frank		
	1.80	
Sold to City of Inglewood	— <u>1.80</u>	
		0.00
Alcast Foundry, et al.		
Successor to Chas. L. Draper, et al.	7.20	
Sold to City of Torrance	— <u>7.20</u>	
		0.00
Alwag, Hilario S. and Emma		
Successor to T. C. Navarro	53.90	
Successor to Peggy Swick	5.50	
Sold to Torrance Unified School District	— <u>59.40</u>	
		0.00
*American Plant Growers, Incorporated		
Second West Coast Basin Judgment	2.60	
Successor to Ben Cluff Dairy		
Successor to Emily and Edward Cost	<u>7.40</u>	
		10.00
Anderson, Rembert C.		
	80.50	
Sold to Sparkletts Drinking Water Corporation	— <u>80.50</u>	
Associated Southern Investment Company		
(formerly Edison Securities Company)		46.70
		0.00
Atlantic Richfield Company		
(formerly Richfield Oil Company)		4,428.00
Ballman, Frank A. and Rosemary N.		
		7.00
Bank of America National Trust and Savings Association (Trust BI-51)		
	0.10	
Released to Michael L. Rockwell	— <u>0.10</u>	
		0.00
Barclay, Richard and R. A. Watt		
Successors in part to Isabela J. Granz Estate		
Successor in part to Isabela J. Granz	13.55	
Successors to Emma J. Osborn		
Successor in part to Isabela J. Granz	32.66	
Successors in part to George R. Murdock		
Successor in part to Isabela J. Granz	13.75	
Sold to City of Torrance	— <u>59.96</u>	
		0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
Bauman, Gus A. Transferred to Palos Verdes Begonia Farm	0.00
Bego Corporation Sold to Estate of Golda Delaney	4.10 <u>- 4.10</u>
	0.00
Burke, W. F. and Lois Price Sold to H. S. Scott	9.50 <u>- 9.50</u>
	0.00
Belvidere Mutual Water Company Sold to City of Torrance	33.40 <u>- 33.40</u>
	0.00
Boise Cascade Building Company Successor in Part to Joughin Torrance Ranch Successor in part to Isabela J. Granz	16.92
California, State of Successor to Robert L. Fullilove Successor in part to Kelly Pipe Company Successor to Joe Moniz Jr. Successor in part to Flavio Rodriguez Successor in part to A. H. Smith, Sam Surber and Freda Smith Sold to Sparkletts Drinking Water Corporation	1.00 16.30 2.20 4.00 2.60 <u>- 26.10</u>
	0.00
*California Water Service Company	3,071.00
Carson Estate Company Sold to Dominguez Water Corporation	130.00 <u>- 130.00</u>
	0.00
*Carson-Madrona Company Successor to Chanslor-Western Oil and Development Co.	104.00
*Chandler's Palos Verdes Sand and Gravel Corporation Successor to Southwestern Portland Cement Company Second West Coast Basin Judgment Successor to Torrance Sand and Gravel Corporation Successor to Western Investment Company	15.00 95.20 <u>184.00</u>
	294.20
Chanslor-Western Oil and Development Company (Formerly Chanslor Canfield Midway Oil Company) Sold to Carson-Madrona Company	104.00 <u>- 104.00</u>
	0.00
Christie, Clem; Don C. Fohl and Leon Larson (Trustees of Wilmington Cemetery Association) Abandoned	0.02 <u>- 0.02</u>
	0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Cluff, Ben Dairy		
Successor to Edward and Emily Cost	7.40	
Sold to American Plant Growers, Inc	- 7.40	
		0.00
Coast Forest Products		
Successor to Southwest Steel Rolling Mills		
Successor to A. K. Wilson Lumber Company, a corporation		3.40
Callister, Cameron	136.82	
Quitclaimed to Normandie Park	-136.82	
		0.00
Columbia Broadcasting System, Inc.	18.50	
Sold to Ronald E. Moran	- 9.00	
		9.50
Cost, Edward and Emily	7.40	
Sold to Ben Cluff Dairy	- 7.40	
		0.00
Curtis, Owen W.	3.80	
Sold to Southern California Water Company	- 3.44	
		0.36
Del Amo Estate Company	121.00	
Sold to Dominguez Water Corporation	-121.00	
		0.00
Delaney, Golda, Estate of		
(Formerly Arthur J. Delaney)		
Successor to Bego Corporation		4.10
*Desser Enterprises		
Second West Coast Basin Judgment		0.00
Dominguez Estate Company	254.00	
Sold to Dominguez Water Corporation	-254.00	
		0.00
*Dominguez Water Corporation	9,477.80	
Successor to Carson Estate Company	130.00	
Successor to Don Wilson Builders		
Successors to Isamu, Kazuo and Yoshiki R. Kita		
Successors to Lathrop M. Ellinwood	32.60	
Successor to Del Amo Estate Company	121.00	
Successor to Dominguez Estate Company	254.00	
Successor in part to H. J. Early	91.00	
Successor to Jeanette R. Haydenbeck		
(formerly Jeanette R. Reifsnnyder)	0.70	
Successor to Kikuno Nakano, et al.	19.30	
Successor to R. A. Watt, Incorporated		

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
*Dominguez Water Corporation (continued)	
Successor in part to Joughin Torrance Ranch	
Successor in part to Isabela J. Granz	55.35
Successor to Ned Ewing, et al.	
Successor in part to Isabela J. Granz Estate	
Successor in part to Isabela J. Granz	<u>6.50</u>
	10,188.25
Don Wilson Builders	
Successors to Kasuo Isamu and Yoshiki R. Kita	
Successors to Lathrop M. Ellinwood	32.60
Sold to Dominguez Water Corporation	<u>- 32.60</u>
	0.00
Douglas Aircraft Company, Incorporated	
(See McDonnell Douglas Corp.)	
Draper, Charles L.	7.20
Sold to Alcast Foundry, et al.	<u>- 7.20</u>
	0.00
Early, H. J. and Daisy	111.00
Sold to Dominguez Water Corporation	<u>- 91.00</u>
Sold to Samuel R. and Raymond S. Fujimoto	<u>- 20.00</u>
	0.00
Edison Securities Company	
(Now known as Associated Southern Investment Company)	
Ellinwood, Lathrop M.	32.60
Sold to Isamu, Kasuo and Yoshiki R. Kita	<u>- 32.60</u>
	0.00
*El Segundo, City of	953.00
Engelsma, Jake	
Successor to Wilbur Hornstra	14.10
Etchmendi, Caroline, Estate of	8.20
Ewing, Carmelita Rosecrans	91.30
Sold to Southern California Water Company	<u>- 91.30</u>
	0.00
Ewing, Ned et al.	
Successor in part to Isabel J. Granz Estate	6.50
Sold to R. A. Watt, Incorporated	<u>- 6.50</u>
	0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
Flesh, Leslie R. and Andor Pasternak et al. Successors to Alfred D. and Ruth Seaback	3.50
*Fletcher Oil and Refining Company (Formerly Fletcher Oil Company)	86.30
Frogge, W. J. Sold to Sigmund S. and Lionel S. Hockwald	12.50 — 12.50 <hr/> 0.00
Fukuwa, Herbert Sakaye Doing business as Mayflower Nurseries	0.00 0.00 <hr/> 0.00
Fullilove, Robert L. Sold to State of California	1.00 — 1.00 <hr/> 0.00
Fujimoto, Samuel R. and Raymond S. Successor in part to H. J. and Daisy Early	20.00
Gerahue Land Company Successor and Assignee for A. S. Johnston Drilling Company Abandoned Water Right	11.90 — 11.90 <hr/> 0.00
*Gillingham, Florence R., et al.	2 40
*Gonzalez, Felipe and Gabriela	34.30
Grand Land Company Successor in part to Smith, A. H. (Sam Surber and Freda Smith) Abandoned Water Rights 1961-62	5 70 — 5.70 <hr/> 0.00
*Grant, John, Estate of	59.00
Granz, Isabela J. (Per Judgment) <u>Partitioned to heirs</u> Joughin Torrance Ranch Isabela J. Granz Estate Emma J. Osborn George R. Murdock <u>Subject to long term lease:</u> Standard Oil Company of California Superior Oil Company	380.00 — 212.42 — 33.80 — 32.66 — 15.12 (59.60) (26.40) <hr/> 86.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Granz, Isabela J., Estate of		
Successor in part to Isabela J. Granz	33.80	
Sold in part to Ned Ewing, et al.	— 6.50	
Sold in part to R. A. Watt, Incorporated	— 13.75	
Sold in part to Richard Barclay and R. A. Watt	— 13.55	
		0.00
*Harris, R. and L.		
Successor to Lawrence I. Liston	0.70	
Disclaimed Water Right	— 0.70	
		0.00
*Harris Tube, Incorporated		
Successor in part to B. Robinson and Associates		0.70
Successors in part to James K. Lawler's Estate		0.70
Hawthorne, City of		1,882.00
Henderson, Beatrice M.	1.30	
Abandoned Water Right	— 1.30	
		0.00
Heydenbeck, Jeanette R.		
(Formerly Jeanette R. Reifsnnyder)	0.70	
Sold to Dominguez Water Corporation	— 0.70	
		0.00
*Hillside Memorial Park	16.70	
Successor to Sigmund S. and Lionel S. Hockwald		
Successors to W. J. Frogge	12.50	
		29.20
Hockwald, Sigmund S. and Lionel S.		
Successor to W. J. Frogge	12.50	
Sold to Hillside Memorial Park	— 12.50	
		0.00
*Hollywood Turf Club		282.00
Hornstra, Wilbur	14.10	
Sold to Jake Engelsma	— 14.10	
		0.00
Hunt, Donald G.		
Successor to James Scanda	1.90	
Sold to Kenichi Inose	— 1.90	
		0.00
*Industrial Chemical Division, Allied Chemical Corporation		255.00
(Formerly Allied Chemical Corporation, General Chemical Company)		

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Inglewood, City of	4,382.00	
Successor to Frank Abell	1.80	
Successor in part to George R. Murdock		
Successor in part to Isabela J. Granz	<u>1.37</u>	
		4,385.17
*Inose, Kenichi		
Successor to Donald G. Hunt		
Successor to James Scanda and George Nassin	1.90	
Successor to Thaxter, Ralph and Lois A. LeNoir	<u>3.50</u>	
		5.40
Isamu, Kasuo and Yoshiki R. Kita		
Successor to Lathrop M. Ellinwood	32.60	
Sold to Don Wilson Builders	<u>- 32.60</u>	
		0.00
*Ishibashi, Aki		
Successor to Alice M. Ueda, listed in Second West Coast Basin Judgment		0.00
Jenkins, Harry C.		
Successor to H. L. Perry		
Successor to Mrs. Zoraida Parke	1.80	
Sold to ABC Nursery, Incorporated	<u>- 1.80</u>	
*Johns-Manville Products Corporation		881.00
Johnson, C. F.	12.20	
Transferred to Kaoru and Satoru Wada	<u>- 12.20</u>	
		0.00
Johnston, A. S., Drilling Company	11.90	
Assigned to Gerahue Land Company	<u>- 11.90</u>	
		0.00
Jones, Anna Mae	50.20	
Sold to City of Torrance	<u>- 50.20</u>	
		0.00
Joughin Torrance Ranch		
Successor in part to Isabela J. Granz	212.42	
Sold in part to Normandie Park via Cameron Collister	- 136.82	
Sold in part to R. A. Watt, Incorporated	- 55.35	
Sold in part to Boise Cascade Building Company	<u>- 16.92</u>	
		3.33
Jungquist, Fred A.		3.70
(Formerly Katherine P. Woodman Jungquist)		
Kahlert, et al		
Successor in part to Kelly Pipe Company	18.90	
Sold to Sparkletts Drinking Water Corporation	<u>- 18.90</u>	
		0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
Kelly Pipe Company	49.00
Sold in part to State of California	-16.30
Sold in part to Kahlert, et al.	-18.90
Sold in part to Sparkletts Drinking Water Corporation	-13.80
	<hr/> 0.00
Kurtz, Gladys	3.50
Sold to Sparkletts Drinking Water Corporation	- 3.50
	<hr/> 0.00
Lawler, James K.	3.10
Sold to B. Robinson and Associates	- 3.10
	<hr/> 0.00
*Lermens, Alfred	0.70
Leuzinger, Emma L.	1.40
Liston, Lawrence	0.70
Sold to R. and L. Harris	- 0.70
	<hr/> 0.00
Long Beach, City of	0.70
Lopes, Frank	3.70
Los Angeles, City of	1,503.00
*Los Angeles County—Alondra Park	28.70
Successor to Los Angeles County Flood Control District	37.60
Successor in part to A. H. Smith and Sam Serber, et al.	1.40
	<hr/> 67.70
Los Angeles County Flood Control District	37.60
Successor in part to A. H. Smith, et al.	1.40
Sold to Los Angeles County — Alondra Park	- 39.00
	<hr/> 0.00
*Los Angeles County Sanitation District No. 2	102.00
*Los Angeles County Waterworks District No. 13	1,352.00
*Los Angeles County Waterworks District No. 22	551.00
*Los Angeles County—Western Avenue Golf Course	296.00
Second West Coast Basin Judgment listed as Board of Retirement of the Los Angeles County Employees Retirement System.	
*Loyola University of Los Angeles	48.10

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
*Manhattan Beach, City of	1,131.20
*Mayflower Nurseries (See Herbert Sakaye Fukuwa)	0.00
McCandless, James Sold to Sparkletts Drinking Water Corporation	6.70 - 6.70 <hr/> 0.00
McDonnell Douglas Corporation (Formerly Douglas Aircraft Company, Incorporated) Lease from United States Navy Department Successor to Aluminum Company of America	1.70
Mobil Oil Corporation (Formerly Socony Mobil Oil Company)	2,570.00
Moneta Mutual Water Company Sold to City of Torrance	916.00 -916.00 <hr/> 0.00
Moniz, Joe, Jr. Sold to State of California	2.20 - 2.20 <hr/> 0.00
Moran, Ronald E. Successor in part to Columbia Broadcasting System, Incorporated	9.00
*Mori, Roy H. and Kinji Second West Coast Basin Judgment	5.60
Murdock, George R. Successor in part to Isabela J. Granz Sold in part to R. Barclay and R. A. Watt Sold in part to City of Inglewood	15.12 - 13.75 - 1.37 <hr/> 0.00
Nakano, Kikuno,, et al. Sold to Dominguez Water Corporation	19.30 -19.30 <hr/> 0.00
Navarro, T. C. Sold to Hilario S. and Emma Alweg	53.90 -53.90 <hr/> 0.00
Norair, A Division of Northrop Corporation (Formerly known as Northrop Aircraft, Inc.)	38.15
Normandie Park Successor to Joughin Torrance Ranch via Cameron Collister Successor in part to Isabela J. Granz Sold to City of Torrance	136.82 -136.82 <hr/> 0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Osborn, Emma J.		
Successor in part to Isabela J. Granz	32.66	
Sold to R. Barclay and R. A. Watt	<u>-32.66</u>	
		0.00
*Otani, Chisato		0.00
Pacific Crest Cemetery Company	17.70	
Successor to H. S. Scott		
Successor to W. F. Burke	9.50	
Successor to Wada, Kaoru and Satoru		
Successor to C. F. Johnson	<u>12.20</u>	
		39.40
*Palos Verdes Begonia Farm		0.00
Successor to Gus A. Bauman		
*Palos Verdes Water Company		999.00
*Park Water Company		160.00
Parke, Zoraida	1.80	
Sold to H. L. Perry	<u>- 1.80</u>	
		0.00
Paschke, William Joseph	0.02	
Abandoned Water Right	<u>- 0.02</u>	
		0.00
Perry, H. L.		
Successor to Zoraida Parke	1.80	
Sold to Harry C. Jenkins	<u>- 1.80</u>	
		0.00
*Phillips Petroleum Company		167.00
(Formerly Tidewater Oil Company)		
Rehor, Josephine P.		2.20
Reifsnnyder, Jeanette R.		
(Now known as Jeanette R. Heydenbeck)		
Richfield Oil Corporation		
(Now known as Atlantic Richfield Company)		
Robinson, B., and Associates		
Successor to James K. Lawler	3.10	
Sold in part to Harris Tube, Incorporated	- 0.70	
Sold in part to Southern California Water Company	<u>- 2.40</u>	
		0.00
Rockwell, Michael L.		
Successor to Bank of America National Trust and Savings Association		0.10
(Trust B 1-51)		

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Rodriguez, Flavio		
Sold to State of California	6.10	
Disclaimed Water Right	-4.00	
	<u>-2.10</u>	
		0.00
*Roman Catholic Archbishop of Los Angeles		
(Holy Cross Cemetery)		72.30
Ruffner Corporation		
Successor to Louis M. Sepulveda	0.70	
Abandoned Water Right	-0.70	
	<u>-0.70</u>	
		0.00
Ryan Aeronautical Company		
Sold to Southern California Water Company	20.20	
	<u>-20.20</u>	
		0.00
*Santa Fe Land Improvement Company		39.50
Scanda, James and George Nassin		
Sold to Donald G. Hunt	1.90	
	-1.90	
	<u>-1.90</u>	
		0.00
Schlaegel, Keith W. and Opal B.		
Sold to Sidney R. and Charlotte W. Title	13.60	
	<u>-13.60</u>	
		0.00
Scott, H. S.		
Successor to W. F. Burke and Lois Price	9.50	
Quitclaimed to Pacific Crest Cemetery Company	-9.50	
	<u>-9.50</u>	
		0.00
Seaback, Alfred D. and Ruth		
Sold to Leslie R. Flesch and Andor Pasternak, et al.	3.50	
	<u>-3.50</u>	
		0.00
Sepulveda, Louis M.		
Acquired by Ruffner Corporation	0.70	
	<u>-0.70</u>	
		0.00
*Sheets, Esther M.		5.50
(Formerly Clyde L. Sheets)		
*Shell Oil Company		4,516.00
*Shinoda Brothers, Incorporated		22.50
Second West Coast Basin Judgment		
Smith, A. H., (Sam Surber and Freda Smith)		
Sold in part to L. A. Co. Flood Control District	9.70	
Sold in part to State of California	-1.40	
Sold in part to Grand Land Company	-2.60	
	<u>-5.70</u>	
		0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Socony Mobil Oil Company (See Mobil Oil Company)		
*Southern California Edison Company		10.40
Southern California Water Company	6,265.30	
Successor in part to B. Robinson and Associates		
Successor in part to James K. Lawler's Estate	2.40	
Successor in part to Owen W. Curtis	3.44	
Successor to C. F. and W. S. Rosecrans listed as Carmelita Rosecrans Ewing	91.30	
Successor to Ryan Aeronautical Company	20.20	
Successor to Southern Pacific Company	166.00	
	<hr/>	6,548.64
Southern Pacific Company	166.00	
Sold to So. California Water Company	- 166.00	
	<hr/>	0.00
Southwest Steel Rolling Mills		
Successor to A. K. Wilson Lumber Company	3.40	
Sold to Coast Forest Products	- 3.40	
	<hr/>	0.00
Southwestern Portland Cement Company	15.00	
Sold to Chandler's Palos Verdes Sand & Gravel Corporation	- 15.00	
	<hr/>	0.00
Spanish American Institute		44.40
Sparkletts Drinking Water Corporation		
Successor to Rembert C. Anderson, et al.	80.50	
Successor to State of California		
Successor to:		
Robert L. Fullilove	1.00	
Kelly Pipe Company (part only)	16.30	
Joe Moniz, Jr.	2.20	
Flavio Rodriguez (part only)	4.00	
A. H. Smith (Sam Surber and Freda Smith) (part only)	2.60	
Successor to Kahlert, et al.		
Successors in part to Kelly Pipe Company	18.90	
Successor in part to Kelly Pipe Company	13.80	
Successor to Gladys Kurtz	3.50	
Successor to James McCandless	6.70	
Successor to Wechsler, B. A.		
Successor to Mates Tune, et al.		
Successors to Josephine Watkinson	3.10	
	<hr/>	152.60
*Standard Oil Company of California		4,541.70
*Stauffer Chemical Company		521.00
Swick, Peggy	5.50	
Sold to Hilario and Emma Alwag	- 5.50	
	<hr/>	0.00

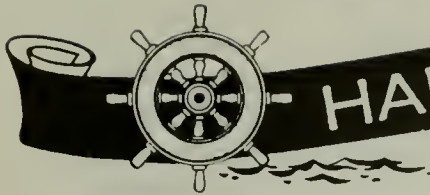
ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Texaco, Inc.		3,432.00
Thaxter, Ralph and Lois A. LeNoir	3.50	
Sold to Kenichi Inose	<u>- 3.50</u>	0.00
Title, Sidney R. and Charlotte W.		
Successor to Keith W. and Opal B. Schlaegel	13.60	
Sold to ABC Nursery, Incorporated	<u>-13.60</u>	0.00
*Torrance, City of	2,519.00	
Successor to Alcast Foundry, et al		
Successor to Chas. L. Draper, et al.	7.20	
Successor to Richard Barclay and R. A. Watt		
Successors in part to Isabela J. Granz Estate	13.55	
Successors in part to George R. Murdock	13.75	
Successors to Emma Osborn	32.66	
(All three above are successors in part to Isabela J. Granz)		
Successor to Belvidere Mutual Water Company	33.40	
Successor to Anna Mae Jones	50.20	
Successor to Moneta Water Company	916.00	
Successor to Normandie Park		
Successor in part to Joughin Torrance Ranch via Cameron Collister		
Successor in part to Isabela J. Granz	136.82	
Successor to Torrance Unified School District		
Successor to Hilario S. and Emma Alwag		
Successors to T. C. Navarro	53.90	
Successor to Peggy Swick	5.50	
Successor to R. A. Watt, Incorporated		
Successor in part to Isabela J. Granz Estate		
Successor in part to Isabela J. Granz	<u>13.75</u>	3,795.73
Torrance Sand and Gravel Corporation		
Successor to Weston Investment Company	184.00	
Sold to Chandler's Palos Verdes Sand and Gravel Corporation	<u>- 184.00</u>	0.00
Torrance Unified School District		
Successor to Hilario S. and Emma Alwag		
Successor to Peggy Swick	59.40	
Sold to City of Torrance	<u>- 59.40</u>	0.00
Tune, Mates, et al.		
Successor to Josephine Watkinson	3.10	
Sold to B. A. Wechsler	<u>- 3.10</u>	0.00
*Union Nursery, Incorporated		4.70
Second West Coast Basin Judgment		
*Union Oil Company of California		2,670.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1970
(Continued)

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
*United States Steel Corporation	1,791.00
Verburg, William and Clara B.	6.70
Sold to ABC Nursery, Incorporated	— 6.70
	0.00
Wada, Kaoru and Satoru	12.20
Transferred from C. F. Johnson	
Sold to Pacific Crest Cemetery Company	— 12.20
	0.00
Watkinson, Josephine	3.10
Sold to Mates Tune, et al.	— 3.10
	0.00
Watson Land Company	42.60
Watt, R. A., Incorporated	
Successor in part to Joughin Torrance Ranch	
Successor in part to Isabela J. Granz	55.35
Successor to Ned Ewing, et al.	
Successor in part to Isabela J. Granz Estate	
Successor in part to Isabela J. Granz	6.50
Successor in part to Isabela J. Granz Estate	
Successor in part to Isabela J. Granz	13.75
Sold to City of Torrance	— 13.75
Sold to Dominguez Water Corporation	— 61.85
	0.00
Wechsler, B. A.	
Successor to Mates Tune, et al.	
Successor to Josephine Watkinson	3.10
Sold to Sparkletts Drinking Water Corporation	— 3.10
	0.00
Weston Investment Company	184.00
Sold to Torrance Sand and Gravel Corporation	— 184.00
	0.00
Wilson, A. K., Lumber Company	3.40
Sold to Southwest Steel Rolling Mills	— 3.40
	0.00
*Wiseburn School District	8.20
Woodman, Katherine P.	
(See Fred A. Jugquist)	
*Ziegler, Maxwell T.	0.00
Total	64,468.25

*
Members of "Exchange Pool" as of September 30, 1970, pursuant to paragraph VII of the Judgment.



HARRY C. JENKINS

yacht & ship broker

16322 Pacific Coast Hwy.
Huntington Beach, Ca. 92647

Phone: 213/592-2362



real estate broker

DEED OF WATER RIGHTS

For a valuable consideration, Harry C. Jenkins and Dorothy B. Jenkins hereby sells and transfers to the ABC Nursery, Incorporated:

The Right to extract 1.80 acre-feet of grantor's Adjudicated Right allocated to grantor (or predecessors in interest) under and pursuant to judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled " California Water Service Company, et al. vs. City of Compton, et al."

Dated: May 15, 1970

ABC Nursery, Incorporated

Harry C. Jenkins and

Dorothy B. Jenkins

By Harry C. Jenkins

Title Owner

Harry C. Jenkins
Dorothy B. Jenkins

DEED OF WATER RIGHTS

For a valuable consideration, JAKE ENGELSMA and SUSAN ENGELSMA, Husband and Wife, transfer to ASAHI FANCY KOI, INC., a California corporation:

The Right to extract 2.00 acre-feet of grantor's Adjudicated Right allocated to grantor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al, vs. City of Compton, et al."

Dated: June 22, 1970.

Jake Engelsma
JAKE ENGELSMA

Mrs Susan Engelsma
SUSAN ENGELSMA

TO 447 C
(Individual)

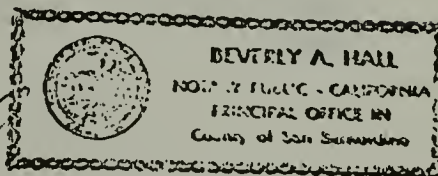
STATE OF CALIFORNIA)
COUNTY OF San Bernardino SS.

On June 22nd, 1970 before me, the undersigned, a Notary Public in and for said State, personally appeared JAKE ENGELSMA and SUSAN ENGELSMA, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

Signature

Beverly A. Hall



BEVERLY A. HALL

My Commission Expires August 12, 1970

WATER RIGHT LICENSE AND AGREEMENT

For a valuable consideration, JAKE ENGELSMA and SUSAN ENGELSMA, Husband and Wife, hereby grant to ASAHI FANCY KOI, INC., a California corporation: a license to extract 12.10 acre-feet of licensor's Adjudicated Right allocated to licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961, and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al." during the period commencing July 1, 1970 and continuing to and including June 30, 1980.

Said License is granted, subject to the following conditions:

- (1) Licensee shall exercise said right and extract the same on behalf of JAKE ENGELSMA and SUSAN ENGELSMA during the period above specified and put the same to beneficial use and licensee shall not by the exercise hereunder of said right acquire any right to extract water independent of the rights of licensor.
- (2) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
- (3) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
- (4) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license.
- (5) Licensee shall pay to Licensor the sum of \$20.00 per acre-feet per year, payable annually, from such time as water is extracted by Licensee.

JAKE ENGELSMA and SUSAN ENGELSMA, Husband and Wife, warrant that it has 12.10 acre-feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 12.10 acre-feet during period of July 1, 1970 through June 30, 1980.

Licensee shall pay to licensor the sum of \$20.00 per acre-feet per year for the first 5 years of the term of this license.

For each of the last 5 years of the term of this license, licensee shall pay licensor an increased rental based upon the increase in the cost of living index. If the Consumer Price Index for Los Angeles (hereinafter referred to as CPI) for the month or other period next previous to the start of the last 5 years of this license is greater than the CPI for the month or other period next previous to the date of this license, then licensor shall pay an increase in rent that is commensurate to the said differential in CPI's.

Notwithstanding the foregoing provision, a decrease in the CPI during the first 5 years of the license shall not result in a reduction of the rent.

Dated: June 19, 1970.

Jake Engelsma
JAKE ENGELSMA

Mrs. Susan Engelsma
SUSAN ENGELSMA

ASAHI FANCY KOI, INC.
A California corporation

By Mitsuru Nakamaru
MITSURU NAKAMARU
President

By Kinichi Watase
KINICHI WATASE
Secretary

TO 447 C
(Individual)

STATE OF CALIFORNIA

COUNTY OF San Bernardino

SS;

On June 22nd, 1970 before me, the undersigned, a Notary Public in and for said State, personally appeared JAKE ENGELSMA and SUSAN ENGELSMA, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

Signature Beverly A. Hall

NOTARIAL
(Corporation)



STATE OF CALIFORNIA

COUNTY OF Los Angeles

SS.

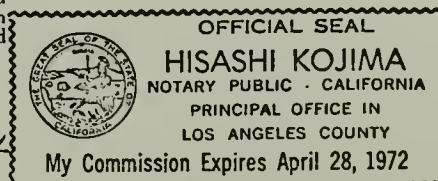
On June 19, 1970 before me, the undersigned, a Notary Public in and for said State, personally appeared Mitsuru Nakamaru known to me to be the President President, and Kinichi Watase known to me to be the Secretary Secretary of the corporation that executed the within Instrument, known to me to be the persons who executed the within Instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Signature Hisashi Kojima

Hisashi Kojima

Name (Typed or Printed)



AGREEMENT OF LEASE AND TRANSFER OF WATER RIGHTS

THIS AGREEMENT made and entered into as of the first day of October, 1969, by and between the CITY OF EL SEGUNDO, a general law city of the State of California, hereinafter referred to as "City", and ATLANTIC RICHFIELD COMPANY, a Pennsylvania corporation, hereinafter referred to as "Atlantic Richfield".

WITNESSETH:

That the parties hereto do mutually agree as follows:

The City hereby leases and transfers to Atlantic Richfield for and during a period of one (1) year commencing with the date hereof and continuing to and including September 30, 1970, water rights consisting of the right annually to pump nine hundred fifty-three (953) acre-feet of water for and during said period from the West Coast Basin, being the ground water basin within the West Basin Water Replenishment District, in the State of California.

Atlantic Richfield shall pay to City a rental of Twenty-five and No/100 Dollars (\$25.00) per acre-foot for the water rights leased and transferred hereunder.

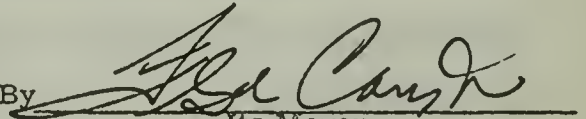
Subject to the limitation hereinafter imposed the total quantity of water which Atlantic Richfield shall be entitled to pump as a result of this lease and transfer is nine hundred fifty-three (953) acre-feet and the total consideration therefore, computed on the basis of said rental of Twenty-five and No/100 Dollars (\$25.00) per acre-foot, is Twenty Three Thousand Eight Hundred Twenty-five Dollars (\$23,825.00) which shall be paid to City in twelve (12) equal monthly installments of One Thousand Nine Hundred Eighty-five and 41.6/100 Dollars (\$1,985.416) beginning on the fifteenth day of November, 1969, and continuing on the fifteenth day of each month thereafter for a period of one (1) year.

Notwithstanding the foregoing lease and transfer of City's water rights it is mutually agreed between the parties that City may at any time without prior notification or approval of Atlantic Richfield, pump any portion of said nine hundred fifty-three (953) acre-feet of water at any time that City determines that an emergency requires the use of such water by the City of El Segundo. Immediately following any such pumping by the City, City shall notify Atlantic Richfield of the quantities pumped so that appropriate allocation may be made in reports required by law.

City represents and warrants that it owns said water rights leased and transferred hereunder, and that City has a right to pump said nine hundred fifty-three (953) acre-feet of water for and during said period, and that City has the full right to lease and transfer to Atlantic Richfield said water rights and the right to pump said nine hundred fifty-three (953) acre-feet of water during said period.

Dated this 22d day of December, 1969.

CITY OF EL SEGUNDO

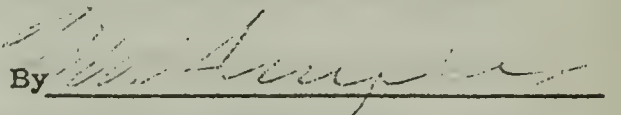
By 
Its Mayor

ATTEST:


City Clerk

(SEAL)

ATLANTIC RICHFIELD COMPANY

By 
ASSISTANT VICE PRESIDENT
Title

(SEAL)

1 MODIFIED AGREEMENT FOR
2 LEASE OF WATER RIGHTS
3

4 THIS AGREEMENT amends and modifies that certain agreement
5 entered into on the 2nd day of April, 1965, by and between the
6 CITY OF MANHATTAN BEACH, hereinafter referred to as "CITY" and
7 ATLANTIC RICHFIELD COMPANY (formerly known as Richfield Oil
8 Corporation), hereinafter referred to as "ARCO". City and ARCO
9 agree that the agreement of April 2, 1965 is amended and modified
10 as follows:

11 Paragraph 2 of said agreement shall be modified to
12 provide as follows:

13 "The term of said agreement shall be extended for a
14 period of sixteen (16) months or to January 31, 1972,
15 provided, however, City shall reserve the right to
16 cancel said agreement upon giving sixty (60) days
17 prior written notice to ARCO."

18 Paragraph 4 of said agreement shall be modified to
19 provide as follows:

20 "During the extended term of this agreement, ARCO
21 shall be permitted to pump at the rate of 91.667 acre
22 feet per month, commencing September 1, 1970."

23 Paragraph 5 of said agreement shall be modified to
24 provide as follows:

25 "During the extended term of said agreement the
26 price to be paid to City shall be Twenty-Nine
27 (\$29.00) Dollars per acre foot."

28 Except as specifically amended or modified herein, all
29 of the remaining terms and conditions of the agreement of
30 April 2, 1965 shall remain in full force and effect.

31 IN WITNESS WHEREOF, the City has by action of its
32 City Council authorized this agreement to be executed for and

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on behalf of the City by its Mayor and attested by its City Clerk, and ARCO has caused the same to be executed by its duly authorized officer.

Dated this 18th day of August, 1970.

CITY OF MANHATTAN BEACH

By William R. Holmgren
Mayor

ATTEST:

HERMAN R. BRANDT, City Clerk

(SEAL)

By Shirley L. Loomis
Deputy

ATLANTIC RICHFIELD COMPANY

By J. M. Loosh
Its Vice-President

(CORPORATE SEAL)

and

By _____
Its

WRS

AGREEMENT OF LEASE AND TRANSFER OF WATER RIGHTS

STANDARD OIL COMPANY OF CALIFORNIA, Western Operations, Inc., hereinafter referred to as "STANDARD," hereby leases and transfers to ATLANTIC RICHFIELD COMPANY, hereinafter referred to as "Atlantic Richfield," for and during the period commencing with the date hereof and continuing to and including September 30, 1970, hereinafter referred to as "said period" water rights consisting of the right to pump two thousand (2,000) acre feet of water for during said period from the West Coast Basin, being a ground water basin within the Central and West Basin Water Replenishment District, in the State of California.

Atlantic Richfield shall pay to Standard a rental of Twenty-five Dollars (\$25.00) per acre foot for the water rights leased and transferred hereunder.

The total quantity of water which Atlantic Richfield shall be entitled to pump as a result of this lease and transfer is two thousand (2,000) acre feet and a total consideration therefore, computed on the basis of said rental of Twenty-five Dollars (\$25.00) per acre foot is Fifty Thousand Dollars (\$50,000), which consideration shall be paid to Standard by Atlantic Richfield's check on or before October 30, 1970.

Atlantic Richfield shall pay all of the assessments levied by the Central and West Basin Replenishment District on all of said two thousand (2,000) acre feet of water, the rights to which are leased and transferred to Atlantic Richfield hereunder, pumped by Atlantic Richfield during said period.

Standard agrees not to pump water from said West Coast Basin during said period in a quantity which would reduce its water rights in the said West Coast Basin below said two thousand (2,000) acre feet.

Standard represents and warrants that it owns (and agrees to indemnify Atlantic Richfield against any claims by others to) said water rights leased and transferred hereunder, and that Standard has the right to pump said two thousand (2,000) acre feet of water for and during said period, and that Standard has the full right, without further authorization or approval of any governmental authority or agency, to lease and transfer to Atlantic Richfield said water rights and the right to pump said two thousand (2,000) acre feet of water during said period.

Dated this 30th day of January, 1970.

STANDARD OIL COMPANY OF CALIFORNIA.
WESTERN OPERATIONS, INC.

By C. W. Kelt
Vice President

By _____

ATLANTIC RICHFIELD COMPANY

By M. J. Campbell
Assistant Vice President

By _____

WATER RIGHTS LICENSE

For a valuable consideration, UNION OIL COMPANY OF CALIFORNIA, a corporation (Union), hereby grants to ATLANTIC RICHFIELD COMPANY, A corporation (Licensee), a license to extract, during the period beginning October 1, 1969 and ending September 30, 1970, 600 acre-feet of the 2670 acre-feet of Adjudicated Right owned by Union under and pursuant to the provisions of the Judgment dated August 18, 1961, and entered in Los Angeles County Superior Court Case No. 506,806, entitled "California Water Service Company, et al, vs. City of Compton, et al".

This license shall be subject to the following conditions:

1. Licensee shall exercise this license and shall extract the aforesaid 600 acre-feet of Adjudicated Right on behalf of Union during the above specified period and shall put the same to beneficial use and Licensee shall not by the exercise hereunder of Union's right acquire any right to extract water independent of the rights of Union.
2. Licensee shall keep and maintain accurate records of its ground water extractions made hereunder and shall report the same to the Central and West Basin Water Replenishment District, to the court-appointed Watermaster, being the Department of Water Resources of the State of California, and to Union.
3. Licensee shall notify the District and the Watermaster that such ground water extraction was made pursuant to the provisions of this license agreement, a copy of which shall be provided to the Watermaster by Union.
4. Licensee shall pay to the District all ground water replenishment assessments levied by the District on the quantity of ground water extracted by Licensee hereunder.

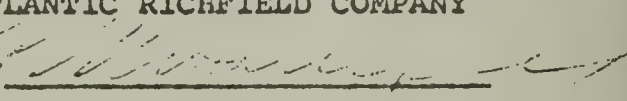
Union warrants that it owns the aforesaid 600 acre-feet of Adjudicated Right and that the same has not been nor shall it be extracted by Union or by any other party under authority granted by Union, during the period beginning October 1, 1969 and ending September 30, 1970.

DATED: February 24, 1970.

UNION OIL COMPANY OF CALIFORNIA

By 
Manager, Corporate Property
Management

ATLANTIC RICHFIELD COMPANY

By 
ASSISTANT VICE PRESIDENT

WATER RIGHTS LICENSE

For a valuable consideration, UNION OIL COMPANY OF CALIFORNIA, a corporation (Union), hereby grants to ATLANTIC RICHFIELD COMPANY, a corporation (Licensee), a license to extract, during the period beginning October 1, 1969 and ending September 30, 1970, 300 acre-feet of the 2670 acre-feet of Adjudicated Right owned by Union under and pursuant to the provisions of the Judgment dated August 18, 1961, and entered in Los Angeles County Superior Court Case No. 506,806, entitled "California Water Service Company, et al, vs. City of Compton, et al".

This license shall be subject to the following conditions:

1. Licensee shall exercise this license and shall extract the aforesaid 300 acre-feet of Adjudicated Right on behalf of Union during the above specified period and shall put the same to beneficial use and Licensee shall not by the exercise hereunder of Union's right acquire any right to extract water independent of the rights of Union.
2. Licensee shall keep and maintain accurate records of its ground water extractions made hereunder and shall report the same to the Central and West Basin Water Replenishment District, to the court-appointed Watermaster, being the Department of Water Resources of the State of California, and to Union.
3. Licensee shall notify the District and the Watermaster that such ground water extraction was made pursuant to the provisions of this license agreement, a copy of which shall be provided to the Watermaster by Union.
4. Licensee shall pay to the District all ground water replenishment assessments levied by the District on the quantity of ground water extracted by Licensee hereunder.

Union warrants that it owns the aforesaid 300 acre-feet of Adjudicated Right and that the same has not been nor shall it be extracted by Union or by any other party under authority granted by Union, during the period beginning October 1, 1969 and ending September 30, 1970.

DATED: June 22, 1970.

UNION OIL COMPANY OF CALIFORNIA

By Fred M. Anderson
Fred M. Anderson, Director
Corporate Real Estate

ATLANTIC RICHFIELD COMPANY

By [Signature]
V ASSISTANT VICE PRESIDENT

DEED OF WATER RIGHTS

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, SECURITY PACIFIC NATIONAL BANK, a national banking association, co-executor of the last Will of Minnie Joughin, Deceased, JOHN J. TUTTLE, individually and as co-executor of the last Will of Minnie Joughin, Deceased, and WALTER D. SANBORN, JR., do and each of them does hereby sell and transfer to BOISE CASCADE BUILDING CO., a Delaware corporation:

The Right to extract 16.92 acre-feet of Grantors' Adjudicated Right allocated to grantors, or their predecessors in interest, under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al."

Dated: June 17, 1970

SECURITY PACIFIC NATIONAL BANK

By: _____

[Signature]
Vice President

By: _____

[Signature]
Trust Real Estate Officer

[Signature]
John J. Tuttle

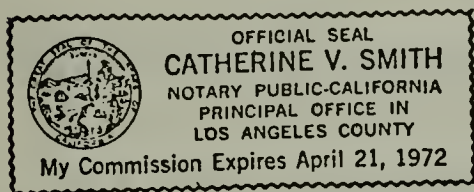
Individually and as Co-Executor

[Signature]
Walter D. Sanborn, Jr.

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES) ss

On this 24th day of June, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared G. V. Rico, known to me to be a Vice President of Security Pacific National Bank, a national banking association, and known to me to be the person who executed the within instrument on behalf of said bank and acknowledged to me that said bank executed the same as co-executor.

WITNESS my hand and official seal.



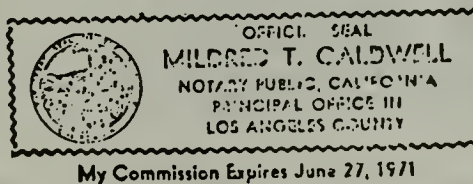
Catherine V. Smith
Notary Public in and for said
County and State.

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES) ss

On this 17th day of June, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared John J. Tuttle, known to me to be the person who executed the within instrument and acknowledged to me that he executed the same individually, as well as in his capacity as co-executor.

WITNESS my hand and official seal.

Mildred T. Caldwell
Notary Public in and for said
County and State.



STATE OF NEW MEXICO)
) ss
COUNTY OF *Las Alamos*)

On this 22nd day of June, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared Walter D. Sanborn, Jr., known to me to be the person who executed the within instrument and acknowledged to me that he executed the same.

WITNESS my hand and official seal.

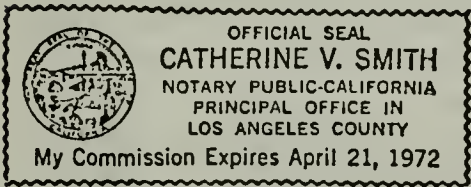
[Signature]
Notary Public in and for said
County and State.

TO CORRECTION ENTERS AUGUST 10, 1970

STATE OF CALIFORNIA)
) ss
COUNTY OF LOS ANGELES)

On this 24th day of June, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared Joe Romero, Trust Real Estate Officer of Security Pacific National Bank, a national banking association, and known to me to be the person who executed the within instrument on behalf of said bank and acknowledged to me that said bank executed the same as co-executor.

WITNESS my hand and official Seal.



[Signature]
Notary Public in and for said
County and State.

LEASE OF WATER RIGHTS

THIS LEASE, made and entered into as of the 1st day of October, 1969, by and between CARSON-MADRONA COMPANY, a partnership consisting of GUILFORD GLAZER and GREAT LAKES PROPERTIES, INC., a Delaware corporation, of 21515 Hawthorne Boulevard, Torrance, California, hereinafter referred to as "Lessor" and DOMINGUEZ WATER CORPORATION, a California corporation, of 21718 South Alameda Street, Long Beach, California, 90810, hereinafter referred to as "Lessee";

WITNESSETH:

WHEREAS, Lessor is the owner of the right to annually take, produce and withdraw from the ground water basin in Los Angeles County, California, commonly known as the "West Coast Basin", approximately 104 acre feet of water per year; and

WHEREAS, Lessee desires to avail itself of the rights of Lessor within West Coast Basin during the water year ending September 30, 1970 and Lessor is willing to allow Lessee to pump Lessor's water right within West Coast Basin, in an amount of 104 acre feet, during the 1969-70 water year, ending September 30, 1970, subject to the terms and conditions hereinafter set forth;

NOW, THEREFORE, IT IS MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

For and in consideration of the covenants and agreement hereinafter mentioned, Lessor does hereby lease, let, hire to, and, during the term hereof, assign to Lessee for the water year October 1, 1969 through September 30, 1970, Lessor's right to withdraw from said West Coast Basin 104 acre feet of water, together with Lessor's right to devote said water to

beneficial uses.

Lessee shall:

1. Pay to Lessor the sum of \$2,600.00, (being \$25.00 per acre foot of water leased and assigned hereunder). Said sum to be payable September 25, 1970.
2. Pay directly to the Central and West Basin Water Replenishment District any and all pump assessments and any and all other charges levied on the waters produced hereunder by Lessee.
3. Pay all power costs and other production costs in connection with the production of the water referred to herein.
4. Prepare and file all necessary reports and documents in connection with the water rights leased herein, required by the Central and West Basin Water Replenishment District.
5. Make the necessary filings with the State Water Rights Board, in connection with the waters produced by Lessee hereunder, as provided in part 5 of Division 2 (Sections 4999 et seq.) of the Water Code of the State of California, as amended, and prepare and file any other reports, filings or the like as may be required, during the term hereof, from time to time by proper authority, in connection with the rights leased hereunder.
6. Prepare, file and furnish a copy to Lessor of all reports, documents and papers necessary and advisable for the preservation of Lessor's water rights hereby leased, without cost to Lessor.

All notices, bills, demands or communications from one party to the other hereunder shall be in writing, and shall be deemed sufficiently served, given or made, by depositing the same in the United States mail in any branch or main post office, in the State of California, postage prepaid, addressed to the respective party at the address hereinabove and recitals

hereof set forth or at such other address either party hereto may specify by written notice given to the other.

This Lease, and all of the rights and obligations herein contained, shall bind and inure to the benefit of the respective successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Lease to be executed in duplicate, each of which shall be deemed an original, by their respective officers, duly authorized and their corporate seals to be hereunto affixed, at Los Angeles, California, as of the day and year first above mentioned.

CARSON-MADRONA COMPANY
a partnership

Guilford Glazer
By: J. P. Pregoner, Atty in fact
Guilford Glazer, partner

GREAT LAKES PROPERTIES, INC., partner

By: D. Marklett, V.P.

(CORPORATE SEAL)

By: Aldon L. Spelman, Atty in fact

DOMINGUEZ WATER CORPORATION

(CORPORATE SEAL)

By: C. W. Beaman
President

By: Gene Lawrence
Secretary

WATER RIGHT LICENSE AND AGREEMENT

For a valuable consideration, UNION BANK, TRUSTEE OF THE ESTATE OF CAROLINE ETCHEMENDY, hereby grants to DOMINGUEZ WATER CORPORATION, a California corporation: a license to extract 10.2 acre feet of licensor's Adjudicated Right allocated to licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al." during the period commencing October 1, 1969 and continuing to and including September 30, 1970.

Said License is granted, subject to the following conditions:

- (1) Licensee shall exercise said right and extract the same on behalf of UNION BANK, TRUSTEE OF THE ESTATE OF CAROLINE ETCHEMENDY during the period above specified and put the same to beneficial use and licensee shall not by the exercise hereunder of said right acquire any right to extract water independent of the rights of licensor.
- (2) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
- (3) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
- (4) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license.

UNION BANK, TRUSTEE OF THE ESTATE OF CAROLINE ETCHEMENDY warrants that it has 10.2 acre feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 10.2 acre feet during period of October 1, 1969 through September 30, 1970.

Dated: JUNE 11 1970

UNION BANK, TRUSTEE OF THE
ESTATE OF CAROLINE ETCHEMENDY

By John D. Rutledge
Title Vice President

DOMINGUEZ WATER CORPORATION

By Arthur L. Reeves
Title Vice President

WATER RIGHT LICENSE AND AGREEMENT

FOR A VALUABLE CONSIDERATION, SANTA FE LAND IMPROVEMENT COMPANY hereby grants to DOMINGUEZ WATER CORPORATION, a license to extract 39.50 acre-feet of licensor's Adjudicated Right allocated to licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al." during the period commencing October 1, 1969 and continuing to and including September 30, 1970.

Said License is granted, subject to the following conditions:

- (1) Licensee shall exercise said right and extract the same on behalf of Santa Fe Land Improvement Company during the period above specified and put the same to beneficial use and licensee shall not by the exercise hereunder of said right acquire any right to extract water independent of the rights of licensor.
- (2) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
- (3) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
- (4) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license.

SANTA FE LAND IMPROVEMENT COMPANY warrants that it has 39.50 acre-feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 39.50 acre-feet during period of October 1, 1969 through September 30, 1970.

Dated: July 23, 1969

SANTA FE LAND IMPROVEMENT COMPANY

By J. R. Scott
Title Vice President

DOMINGUEZ WATER CORP.

By [Signature]
Title President

AND WHEN RECORDED MAIL TO

Name Mr. Robert G. Fletcher,
Street Trustee of Trust "B"
Address P.O. Box 548
City & State Wilmington, CA 90744

RECORDED IN OFFICIAL RECORDS
OF LOS ANGELES COUNTY, CALIF.
FOR TITLE INSURANCE & TRUST CO.

DEC 16

1969 AT 8 A.M.

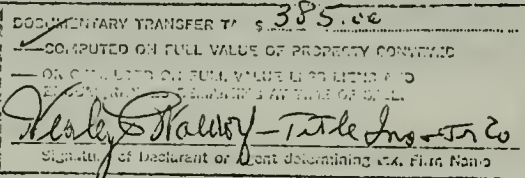
RAY E. LEE, Registrar-Recorder



MAIL TAX STATEMENTS TO

Name Same as above
Street
Address
City & State

SPACE ABOVE THIS LINE FOR RECORDER'S USE



Grant Deed

D.T.T. \$

TO 405 CA (9-68)

THIS FORM FURNISHED BY TITLE INSURANCE AND TRUST COMPANY

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
FREDERICK A. JUNGQUIST, a widower

hereby GRANT(S) to ROBERT G. FLETCHER, DANIEL S. FLETCHER, JR. AND
WILFRED D. FLETCHER, as Trustees of TRUST "B" under the will
of D. S. Fletcher, Deceased

the following described real property in the CITY OF CARSON,
County of Los Angeles, State of California:

Part of the 800 acre allotment of Antonio Jacinto Rocho, in the
Rancho San Pedro, Township of Wilmington, in the county of Los
Angeles, state of California, as per decree of partition in
Case No. 196, District Court, described as follows:

BEGINNING at the southwest corner of land conveyed to Emil Ketler
by deed recorded in book 70 page 325 of Deeds, being a point in the
center of the Peterson Road, at its intersection with the Southerly
line of the Lincoln School Tract, as per map recorded in book 8
page 118 of Maps, produced Westerly; thence West 10 chains; thence
South at right angles 10 chains; thence East at right angles 10
chains; thence North at right angles 10 chains to beginning;
containing 10 acres, being the same property conveyed to G. A. Nuffer,
by deed recorded in book 1711 page 23 of Deeds.

Excepting that portion thereof included within the limits of said
Peterson Road.

Dated December 1, 1969

Frederick A. Jungquist

STATE OF CALIFORNIA }
COUNTY OF Los Angeles } ss.

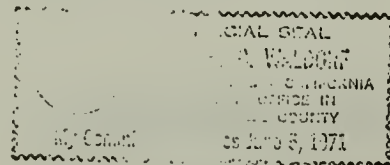
On December 4, 1969 before me, the under-
signed, a Notary Public in and for said State, personally appeared
Frederick A. Jungquist

known to me
to be the person whose name is subscribed to the within
instrument and acknowledged that he executed the same.
Witness my hand and official seal

Signature

Name (Typed or Printed)

(This area for official notarial seal)



5971657

Escrow or Loan No. 99 99 784 WGW

MAIL TAX STATEMENTS AS DIRECTED ABOVE

D. #70-20

RECORDING
DEPARTMENT
OFFICE OF CITY CLERK
103 E. Queen St.
Inglewood, Ca. 90301

2699

Property Transfer Tax
- None

Helen Rieck
Helen Rieck, City Clerk

DEED OF WATER RIGHTS

FREE 20

For a valuable consideration, receipt of which is hereby acknowledged,
SARA MARIE MURDOCK, a widow, hereby grants to the City of Inglewood, a
municipal corporation, the right to extract 1.77 acre feet of water rights of
grantor's adjudicated right allocated to grantor, or predecessors in interest,
under and pursuant to Judgment dated August 18, 1961, and entered in
Los Angeles Superior Court Case No. 506806 entitled "California Water
Service Company, et al. vs. City of Compton, et al."

Dated: June 9, 1970.

Sara Marie Murdock
SARA MARIE MURDOCK, Grantor

STATE OF CALIFORNIA)
) SS.
COUNTY OF LOS ANGELES)

On June 9, 1970, before me, the undersigned, a
Notary Public in and for said State, personally appeared SARA MARIE MURDOCK,
known to me to be the person whose name is subscribed to the within instrument
and acknowledged that she executed the same.

WITNESS my hand and official seal.

Helen Rieck

RECORDED IN OFFICIAL RECORDS
OF LOS ANGELES COUNTY, CALIF.
20 PM 2 PM JUN 25 1970
RAY E. LEE, Registrar-Recorder

2699

2991

DOCUMENTARY TRANSFER TAX \$ 1.10
 X CONTAINED ONE UNIT OF PROPERTY CONVEYED,
 OR ONE UNIT OF PROPERTY LESS LIEN AND
 ENCUMBRANCE AS AT TIME OF SALE.
 BURRIS & LAGERLOF, by *Hedy Flesh*
 Signature of Declarant or Agent Paying Tax, Full Name

DEED OF WATER RIGHTS

FOR A VALUABLE CONSIDERATION, receipt of which
 is hereby acknowledged, HEDY FLESH, ROBERT MORGAN, EMERY
 FLESH and ANDOR PASTERNAK, Grantors, hereby sell and
 transfer to STANLEY C. LAGERLOF, Grantee:

FEE
\$2.80
2 E

The right to extract 3.5 acre feet annually
 from the West Coast Basin, together with any
 allowable carryover, which rights were allocated
 to Grantors' predecessors in interest under and
 pursuant to the judgment dated August 18, 1961,
 and entered in Los Angeles Superior Court Case
 No. 506 806, entitled "California Water Service
 Company, et al vs. City of Compton, et al".

DATED: June 1, 1970.

Hedy Flesh
 Hedy Flesh

Robert Morgan
 Robert Morgan

Emery Flesh
 Emery Flesh

Andor Pasternak
 Andor Pasternak

RECORDED IN OFFICIAL RECORDS
 OF LOS ANGELES COUNTY, CALIF.

50 Min.
 Past

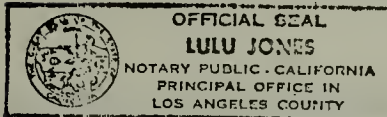
3 P.M. JUN 9 1970

RAY E. LEE, Registrar-Recorder

STATE OF CALIFORNIA,)
) ss.
 COUNTY OF LOS ANGELES)

On June 1, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared HEDY FLESH, known to me to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same.

WITNESS my hand and official seal.

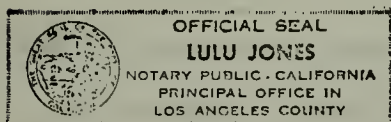


Lulu Jones
 Notary Public

LULU JONES
 My Commission Expires April 20, 1971
 STATE OF CALIFORNIA,)
) ss.
 COUNTY OF LOS ANGELES)

On June 1, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared ROBERT MORGAN, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

WITNESS my hand and official seal.

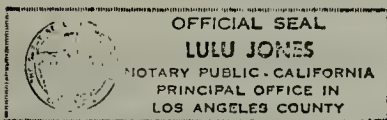


Lulu Jones
 Notary Public

LULU JONES
 My Commission Expires April 20, 1971
 STATE OF CALIFORNIA,)
) ss.
 COUNTY OF LOS ANGELES)

On June 1, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared EMERY FLESCHE, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same.

WITNESS my hand and official seal.

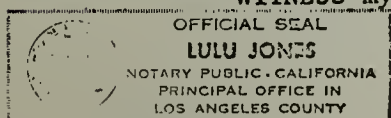


Lulu Jones
 Notary Public

LULU JONES
 My Commission Expires April 20, 1971
 STATE OF CALIFORNIA,)
) ss.
 COUNTY OF LOS ANGELES)

On June 1, 1970, before me, the undersigned, a Notary Public in and for said County and State, personally appeared ANDOR PASTERNAK, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same.

WITNESS my hand and official seal.



Lulu Jones
 Notary Public

LULU JONES
 My Commission Expires April 20, 1971

A G R E E M E N T

70-90

THIS AGREEMENT made and entered into this 13th day of August, 1970, by and between the CITY OF INGLEWOOD, a municipal corporation, hereinafter referred to as "INGLEWOOD" and the DEPARTMENT OF WATER AND POWER OF THE CITY OF LOS ANGELES, hereinafter referred to as "DEPARTMENT";

RECITALS

WHEREAS, both INGLEWOOD and DEPARTMENT are producing from the West Basin; and

WHEREAS, INGLEWOOD has an allowed pumping allocation of 4385.57 acre feet of water per annum in said Basin; and

WHEREAS, DEPARTMENT desires to make temporary use of a portion of INGLEWOOD'S allowed pumping allocation for one water year only;

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

1. INGLEWOOD grants to DEPARTMENT a license to produce a portion of INGLEWOOD'S West Basin allowed pumping allocation in the quantity of 600 acre feet for the water year which commences October 1, 1969, and which water year ends on September 30, 1970.

2. DEPARTMENT agrees to pay INGLEWOOD the net sum of \$10,200 during the month of October, 1970.

3. DEPARTMENT will pay to the Central Basin and West Basin Water Replenishment District any pumping assessments levied by the District during the 1969-1970 water year on the quantity of water extracted by the DEPARTMENT from the West Basin under said license.

4. DEPARTMENT will keep and maintain records of agreed production under this agreement and will report same

to the Watermaster and to INGLEWOOD upon completion of
DEPARTMENT's pumping.

IN WITNESS WHEREOF, the parties hereto have authorized
the due execution hereof by their respective officers the day
and year first above set forth.

DEPARTMENT OF WATER AND POWER OF
THE CITY OF LOS ANGELES
By
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

APPROVED AS TO FORM AND LEGALITY
ROGER ARMEDERGH
City Attorney

AUG 5 1970
By Ralph Guy Wesson
RALPH GUY WESSON
Assistant City Attorney

AUTHORIZED BY RES. 122
AUG 13 1970

By John G. Corbin
Asst. General Manager & Chief Engineer
and Mary J. Born
Secretary

CITY OF INGLEWOOD, a municipal
corporation

By [Signature]
MAYOR PRO TEM

ATTEST:

[Signature]
CITY CLERK

(SEAL)

APPROVED AS TO FORM:

[Signature]
CITY ATTORNEY

ORIGINAL

NO. 10092

A G R E E M E N T

THIS AGREEMENT made and entered into this 17th day of September, 1970, by and between the LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 13 (LOMITA), a public corporation hereinafter referred to as "DISTRICT" and the DEPARTMENT OF WATER AND POWER OF THE CITY OF LOS ANGELES, hereinafter referred to as "DEPARTMENT";

RECITALS

WHEREAS, both the DISTRICT and DEPARTMENT are producing from the West Basin; and

WHEREAS, DISTRICT has an allowed pumping allocation of 1352.00 acre feet of water per annum in said Basin; and

WHEREAS, DEPARTMENT desires to make temporary use of a portion of the DISTRICT'S allowed pumping allocation for one water year only;

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

1. The DISTRICT grants to DEPARTMENT a license to produce a portion of DISTRICT'S West Basin allowed pumping allocation in the quantity of 400 acre feet for the water year which commences October 1, 1969, and which water year ends on September 30, 1970.

2. DEPARTMENT agrees to pay DISTRICT the net sum of \$4,400.00 before January 1, 1971.

3. DEPARTMENT will pay to the Central and West Basin Water Replenishment District any pumping assessments levied by said Replenishment District during the 1969--1970 water year on the quantity of water extracted by the

DEPARTMENT from the West Basin under said license.

4. DEPARTMENT will keep and maintain records of agreed production under this agreement and will report same to the Watermaster and to DISTRICT upon completion of DEPARTMENT'S pumping.

IN WITNESS WHEREOF, the parties hereto have authorized the due execution hereof by their respective officers this day and year first above set forth.

DISTRICT:

LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 13 (LOMITA)

ATTEST: James S. Mize
Executive Officer-Clerk
of the Board of Supervisors

By *[Signature]*
Chairman of the Board of
Supervisors of County of
Los Angeles, as the governing
body of said Waterworks
District.

By *Frances L. Husby*
Deputy

APPROVED AS TO FORM:

JOHN D. MAHARG
County Counsel
County of Los Angeles

By *[Signature]*
Deputy



(S E A L)

DEPARTMENT:

DEPARTMENT OF WATER AND POWER OF
THE CITY OF LOS ANGELES

By
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

By *Edgar Z. Karam*
General Manager and Chief Engineer
and *Harry Brown*
Secretary

SEP 14 1970
By *Ralph G. Wesson*
RALPH GUY WESSON
Assistant City Attorney
ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

AUTHORIZED BY RES. 207
SEP 17 1970

50

SEP 22 1970

James S. Mize
JAMES S. MIZE
EXECUTIVE OFFICER

LEASE OF WATER RIGHTS

THIS AGREEMENT is entered into this 16th day of September, 1970, by and between SOUTHERN CALIFORNIA WATER COMPANY, hereinafter referred to as "SOUTHERN" AND MOBIL OIL CORPORATION, hereinafter referred to as "MOBIL".

For and in consideration of the mutual undertakings and obligations of the parties as hereinafter set out and for other valuable consideration, the parties hereto agree as follows:

1. Mobil hereby leases to Southern and Southern takes from Mobil the right to exercise Mobil's allowed pumping allocation to extract water from the Central Basin (the ground water basin within the Central and West Basin Water Replenishment District in the State of California) to the extent of Ninety (90) acre feet.
2. In consideration of Item 1, above, Southern hereby leases to Mobil and Mobil takes from Southern the right to exercise Southern's appropriative, prescriptive, and adjudicated right to extract water from the West Coast Basin (the ground water basin within the Central and West Basin Water Replenishment District in the State of California) to the extent of Ninety (90) acre feet.
3. The term of these leases shall be for the period commencing September 16, 1970, and continuing to and including September 30, 1970.
4. Southern shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Water Replenishment District on Mobil's said Ninety (90) acre feet of water right in Central Basin.
5. Mobil shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Replenishment District on Southern's said ninety (90) acre feet of water right in West Basin.

6. Any ad valorem tax imposed on these rights by the county assessor shall be paid by the respective owner of the rights.

7. Mobil has been adjudicated to own at least Ninety (90) acre feet of Allowed Pumping Allocation under and pursuant to Judgment dated October 11, 1965 and entered in Los Angeles Superior Court Case No. 786,656 entitled "Central and West Basin Water Replenishment District VS Charles E. Adams, et al". However, Mobil expressly makes no warranty that it is the owner of or has the right to lease the water rights purported to be leased hereunder.

8. Southern has been adjudicated to own at least Ninety (90) acre feet of water in the case entitled "CALIFORNIA WATER SERVICE COMPANY, et al v. City of Compton, et al", Los Angeles Superior Court Case No. 506,806. However, Southern expressly makes no warranty that it is the owner of or has the right to lease the water rights purported to be leased hereunder. In the event, however, that it is deemed at any time during the term hereof that the parties do not own the respective rights leased hereunder or any part thereof, parties shall make adjustment and return of leased rights. The parties to this contract do not warrant that there is sufficient water in said basins to enable extraction of rights leased hereunder, but in the event that either or both parties are prevented from exercising all or any portion of the rights leased hereunder due to exhaustion of said basin or intervention or prohibition by any legally constituted government authority, adjustment shall be made between the parties.

9. The parties shall exercise all of the rights leased hereunder respectively and each shall pump the same on behalf of the other and shall put the same to beneficial use. Southern and Mobil shall be relieved of obligations under this paragraph to the extent that failure to pump any rights leased hereunder is caused by inability to pump or use such water due to strikes, lockouts, algae growth in the water table, or any other reason which would make the water

industrial unusable, acts of God, or other acts, or occasions of which parties have no control. Parties shall give notice within a reasonable time of the existence of any of the aforementioned conditions.

10. Mobil shall not pump water from said Central Basin during the term of this lease in a quantity which would include any portion of the Ninety (90) acre feet leased hereunder.

11. Southern shall not pump water from said West Basin during the term of this lease in a quantity which would include any portion of the Ninety (90) acre feet leased hereunder.

12. Each party shall report all of its extractions made pursuant to this lease to all agencies to whom such reports must be made, or in the alternative, shall provide such information regarding its pumping to the other so that the other may make such reports, if any are required during the term of this lease.

13. If either party to this lease shall desire to serve a notice on the other, such notice shall be deemed to have been made if those sent to Southern are mailed to Mr. C. L. Stuart, Vice-President, Southern California Water Company, 3625 West 6th Street, Los Angeles, California, 90005; and all notices sent to Mobil are mailed to Mr. R. J. Niederstadt, Attention: Mr. M. J. Hage, 3700 West 190th Street, Torrance, California, 90503. Delivery will be deemed to have been made when deposited in the United States mail, postage prepaid. Either party may, by notice in writing to the other, change such address for notices to it.

IN WITNESS WHEREOF THE parties hereto execute this agreement on the date first above written.

SOUTHERN CALIFORNIA WATER COMPANY

By C. L. Stuart
Vice President

	INITIALS	DATE
Accounting Dept.	BLL	9-17-70
Approved as to form for Law Dept.	GLL	9-17-70
Description Checked		

MOBIL OIL CORPORATION

By R. J. Niederstadt
Attorney in Fact

LEASE OF WATER RIGHTS

THIS AGREEMENT is entered into this 26th day of January, 1970, by and between STANDARD OIL COMPANY OF CALIFORNIA, WESTERN OPERATIONS, INC., (a division of Standard Oil Company of California, a Delaware Corporation), hereinafter referred to as "STANDARD" and MOBIL OIL CORPORATION, hereinafter referred to as "MOBIL".

For and in consideration of the mutual undertakings and obligations of the parties as hereinafter set out and for other valuable consideration, the parties hereto agree as follows:

1. Standard hereby leases to Mobil and Mobil takes from Standard the right to exercise Standard's appropriative, prescriptive and adjudicated right to extract water from the West Coast Basin (the ground water basin within the Central and West Basin Water Replenishment District in the State of California) to the extent of One Thousand (1,000) acre feet.
2. The term of this lease shall be for the period commencing February 1, 1970, and continuing to and including September 30, 1970.
3. Mobil shall pay to Standard, by check, on or before September 30, 1970, the sum of Twenty-five Thousand and No/100 Dollars (\$25,000.00), which sum represents Twenty-five and No/100 Dollars (\$25.00) per acre foot.
4. Mobil shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Water Replenishment District on Standard's said One Thousand (1,000) acre feet of water right.
5. Standard has been adjudicated to own at least One Thousand (1,000) acre feet of water in the case entitled CALIFORNIA WATER SERVICE COMPANY, et al v. City of Compton, et al, Los Angeles Superior Court Case No 506,806. However, Standard expressly makes no warranty that it is the owner of or has the right to lease the water rights purported to be leased hereunder.

In the event, however that it is deemed at any time during the term hereof that Standard does not own the rights leased hereunder or any part thereof, Standard shall return to Mobil any consideration paid to Standard, computed on the above price per acre foot for any water rights which Mobil is unable to exercise because of Standard's lack of ownership in said water rights. Standard does not warrant that there is sufficient water in said West Basin so as to enable Mobil to extract the rights leased to it hereunder, but in the event that Mobil is prevented from exercising all or any portion of the rights leased hereunder due to exhaustion of said basin or intervention or prohibition by any legally constituted government authority, any consideration paid by Mobil to Standard shall be returned to Mobil upon the same basis as that stated above.

6. Mobil shall exercise all of the rights leased hereunder and shall pump the same on behalf of Standard and shall put the same to beneficial use. Mobil shall be relieved of its obligations under this paragraph to the extent that its failure to pump any of Standard's rights leased hereunder is caused by Mobil's inability to pump or use such water due to strikes, lockouts, algae growth in the water table, or any other reason which would make the water industrially unusable by Mobil, acts of God, or other acts or occasions of which Mobil has no control. Mobil shall notify Standard within a reasonable time of the existence of any of the aforementioned conditions.

7. Standard shall not pump water from said West Basin during the term of this lease in a quantity which would include any portion of the One Thousand (1,000) acre feet leased hereunder.

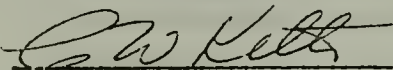
8. Mobil shall report all of its extractions made pursuant to this lease to all agencies to whom such reports must be made, or in the alternative, shall provide such information regarding its pumping to Standard so that Standard may make such reports, if any are required during the term of this lease.

9. If either party to this lease shall desire to serve a notice on the other, such notice shall be deemed to have been made if those sent to Standard are mailed to Mr. R. S. Proctor, General Manager, Attention: Mr. C. D. Barker, Standard Oil Company of California, Western Operations, Inc., 324 West El Segundo Boulevard, El Segundo, California 90245; and all notices sent to Mobil are mailed to Mr. R. J. Niederstadt, Attention: Mr. M. J. Hage, 3700 West 190th Street, Torrance, California 90503. Delivery will be deemed to have been made when deposited in the United States mail, postage prepaid. Either party may, by notice in writing to the other, change such address for notices to it.

IN WITNESS WHEREOF THE parties hereto execute this agreement on the date first above written.

STANDARD OIL COMPANY OF CALIFORNIA
WESTERN OPERATIONS, INC. (a Division
of Standard Oil Company of California,
a Delaware Corporation)

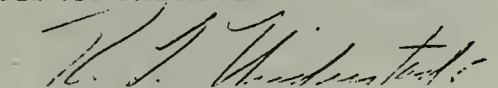
BY



Vice President

MOBIL OIL CORPORATION

BY



Attorney in Fact

LICENSE FOR WATER RIGHTS

This agreement is entered into this 15th day of September, 1970, by and between Southern California Edison Company, (a California corporation), and Associated Southern Investment Company, (a California corporation), hereinafter referred to as LICENSOR, and CHISATO OTANI, hereinafter referred to as LICENSEE.

For and in consideration of the mutual undertakings and obligations of the parties as hereinafter set forth and for other valuable consideration, the parties hereto agree as follows:

1. LICENSOR hereby gives to LICENSEE and LICENSEE takes from LICENSOR the right to exercise LICENSOR'S appropriative, prescriptive and adjudicated right(s) to extract water from the West Coast Basin (the ground water basin within the Central and West Basin Water Replenishment District in the State of California) to the extent of

Ten (10) acre-feet per annum.

2. The term of this license shall be for the water year commencing October 1, 1969 and continuing to and including September 30, 1979 provided, however, that this agreement shall terminate immediately upon the expiration, cancellation or termination of the License previously granted to CHISATO OTANI, bearing Licensor's document number 72153.

3. LICENSEE shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Water Replenishment District in LICENSOR'S said Ten (10) acre-feet of water right(s).

4. LICENSEE shall comply promptly with all requirements of the Central and West Basin Water Replenishment District (including the filing of pumping reports and the obtaining of exchange pool water if necessary) and those of any public agency or authority.

5. LICENSOR has been adjudicated to own at least fifty-seven and one tenth (57.1) acre-feet of water in the case entitled "California Water Service Company, et al, vs. City of Compton, et al," Los Angeles Superior Court Case No. 506,806. However, LICENSOR expressly makes no warranty that it is the owner of or has the right to give the water rights purported to be given hereunder. LICENSOR does NOT warrant that there is sufficient water in said West Coast Basin so as to enable LICENSEE to extract the rights given to it hereunder.

6. LICENSEE shall exercise all of the rights given hereunder and shall pump the same on behalf of LICENSOR and shall put the same to beneficial use. LICENSEE shall be relieved of its obligations under this paragraph to the extent that its failure to pump any of LICENSOR'S rights given hereunder is caused by LICENSEE'S inability to pump or use such water due to strikes, lockouts, algae growth in the water table or any other reason which would make the water agriculturally or industrially unusable by LICENSEE, acts of God or other acts or occasions of which LICENSEE shall notify LICENSOR within a reasonable time of the existence of any of the aforementioned conditions.

7. LICENSOR shall not pump water from said West Coast Basin during the term of this license in a quantity which would include any portion of the Ten (10) acre-feet given hereunder.

8. LICENSEE agrees to relinquish to LICENSOR the right to pump any of the Ten (10) acre-feet herein licensed not pumped by the LICENSEE during the term of this License.

DUPLICATE ORIGINAL

9. If either party to this license shall desire to serve a notice on the other, such notice shall be deemed to have been made if those sent to LICENSOR are mailed to Manager of Right of Way and Land Department, Southern California Edison Company, P. O. Box 351, Los Angeles, California 90053, Attention of Supervisor of Property Management; and all notices sent to LICENSEE are mailed to 18727 Prairie Avenue, Torrance, California. Delivery will be deemed to have been made when deposited in United States mail, postage prepaid. Either party may, by notice in writing to the other, change such address for notices to it.

IN WITNESS WHEREOF, the parties hereto execute this agreement on the date first above written.

SOUTHERN CALIFORNIA EDISON COMPANY,
a California corporation

By

AB Peacock

Manager, Right of Way & Land Dept.

ASSOCIATED SOUTHERN INVESTMENT COMPANY
a California corporation

By

GE Wacker

Vice President

LICENSEE

By

Chisato Otani

Chisato Otani

APPROVED AS TO FORM
ROLIN E. WOODBURY
Vice President & General Counsel
By *CH* Assistant Counsel
Sept. 10, 1970

LEASE OF WATER RIGHTS

THIS LEASE, entered into as of October 1, 1969 by and between PALOS VERDES WATER COMPANY (herein called "Lessor") and TEXACO INC. (herein called "Lessee");

WITNESSETH:

WHEREAS, Lessor owns the prescriptive right to pump annually 999 acre-feet of water from a basin of ground water in southwestern Los Angeles County known as the West Coast Basin, which right was adjudicated and confirmed by the decision of the California District Court of Appeal on February 17, 1964 in California Water Service Company et al v. City of Compton et al (1st Civil No. 21156); and

WHEREAS, Lessor and Lessee desire that Lessor's water rights be leased to Lessee upon the terms and conditions herein stated;

NOW, THEREFORE, it is agreed as follows:

1. Lessor hereby leases to Lessee -- and Lessee hereby takes and rents from Lessor -- the above recited water rights owned by Lessor on the terms and conditions herein stated.

2. The term of this Lease shall be five years commencing October 1, 1969 and ending September 30, 1974. It shall be subject to earlier termination by Lessor on ninety days' advance written notice to Lessee in the event that by reason of any emergency Lessor shall be unable to obtain from sources other than the West Coast Basin the water needed to supply its customers or should the Lessor decide to sell such water rights. In the event of any such premature termination of this Lease, Lessor shall forthwith return to Lessee any rent previously paid which is in excess of

the rent due for the quarterly period in which such termination occurs for water actually pumped by Lessee during such quarterly period as of the date of termination.

3. For the water rights leased to Lessee hereunder Lessee shall pay to Lessor \$30.00 per acre-foot per year.

4. Lessee shall pay directly to the West Basin Water Replenishment District any and all pump assessments and any and all charges levied on the waters produced hereunder by Lessee.

5. Payment of the sums due to Lessor pursuant to Paragraph 3 above shall be made quarterly in advance.

6. Any notices required or permitted hereunder shall be effective when directed to Lessor at Post Office Box 2490, Palos Verdes Peninsula, California 90274 or to Lessee at Post Office Box 817, Wilmington, California 90744 and deposited, postage prepaid, in the United States mail. Either party may from time to time by notice to the other given as aforesaid change its address for future notices hereunder.

7. The respective rights and obligations of Lessor and Lessee hereunder shall extend to and inure to the benefit of and be binding upon their respective successors in interest.

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the day and year first above written.

PALOS VERDES WATER COMPANY

TEXACO INC.

By Charles B. Nollenberger
Vice President

By W. G. Copeland
VICE PRESIDENT

By Philip S. Gaudin
Assistant Secretary

By Philip Bresaz, Jr.
Assistant Secretary

LEASE OF WATER RIGHTS

THIS LEASE, entered into this 24th day of September, 1969, by and between FRED A. JUNQUIST (herein called "Lessor") and TEXACO Inc. (herein called "Lessee"),

W I T N E S S E T H :

WHEREAS, Lessor owns the prescriptive right to pump annually 3.7 acre feet of water from a basin of ground water in southwestern Los Angeles County known as the West Coast Basin, which right was adjudicated and confirmed by the decision of the California District Court of Appeal on February 17, 1964, in California Water Service Company, et al. vs. City of Compton, et al. (1st Civil No. 21156); and

WHEREAS, Lessor and Lessee desire that Lessor's water rights be leased to Lessee upon the terms and conditions herein stated;

NOW, THEREFORE, it is agreed as follows:

1 - Lessor hereby leases to Lessee and Lessee hereby takes and rents from Lessor the above recited rights owned by Lessor on the terms and conditions herein stated.

2 - The term of this Lease shall be for the period commencing October 1, 1969 and ending September 30, 1970.

3 - For the water rights leased to Lessee hereunder, Lessee shall pay to Lessor \$18.00 for each acre foot.

4 - Payment of the sums due to Lessor pursuant to Paragraph 3 above shall be made yearly in advance.

5 - The respective rights and obligations of Lessor and Lessee hereunder shall extend to and inure to the benefit of and be binding upon their respective successors in interest.

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the day and year first above written.

FRED A. JUNQUIST

TEXACO Inc.

Fred A. Junquist

By

Wallace B. Lee

Vice President

Attest

Sydney H. Lee

Assistant Secretary

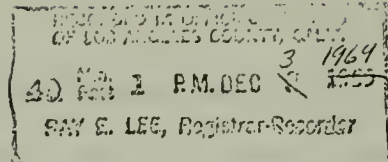
APPROVED AS TO TERMS
SACB

APPROVED AS TO FORM
W. M. Lee

2236

City of Torrance
3031 Torrance Blvd
Torrance Calif 90503

DEED OF WATER RIGHTS



EX 04571 PG 939

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, RONALD E. MORAN and ALDEEN E. MORAN, husband and wife, convey, transfer and assign to the CITY OF TORRANCE, a Chartered Municipal Corporation:

All of the right, title and interest of RONALD E. MORAN and ALDEEN E. MORAN, husband and wife, jointly and severally, to annually take, extract, pump or otherwise remove water from the West Coast Basin within the County of Los Angeles, State of California, which Basin is more particularly described in the Report of Referee on file in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al., v. City of Compton, et al.", said right being a portion of that allocated to COLUMBIA BROADCASTING SYSTEM, INC., a New York corporation, in the judgment on file in said action and which right was conveyed to RONALD E. MORAN and ALDEEN E. MORAN, husband and wife, or either of them, by COLUMBIA BROADCASTING SYSTEM, INC.

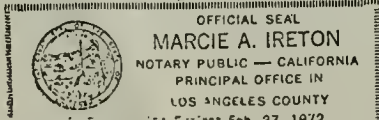
IN WITNESS WHEREOF, RONALD E. MORAN and ALDEEN E. MORAN, husband and wife, have caused this instrument to be executed on the 1st day of November, 1969.

Ronald E. Moran
RONALD E. MORAN

Aldeen E. Moran
ALDEEN E. MORAN

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On this 27th day of October, 1969, before me, the undersigned, a Notary Public in and for said County and State, personally appeared RONALD E. MORAN and ALDEEN E. MORAN, husband and wife, known to me to be the persons who executed the within instrument, and acknowledged to me that they executed the same.



Marcie A. Ireton
Notary Public in and for said County and State

D-3073

CERTIFICATE OF ACCEPTANCE

THIS IS TO CERTIFY that the interest in ^{water rights} ~~real property~~ conveyed by
the deed or grant dated November 1, 1969 from
Ronald E. Moran and Aldeen E. Moran

to the CITY OF TORRANCE, a municipal corporation, is hereby accepted
by order of Resolution No. 3417 adopted by the City Council of the
City of Torrance on February 18, 1958, and duly recorded on the 26th
day of February, 1958, in Book 56502, Page 139, Official Records, in
the office of the County Recorder of Los Angeles County, and that the
Grantee consents to the recordation thereof by its duly authorized
officer.

CITY OF TORRANCE

By VERNON W. COIL
VERNON W. COIL, City Clerk

DATED: December 2, 1969

By Marjorie P. Moss
Marjorie P. Moss, Deputy City Clerk

(Section 27281 of Government Code; as amended)

PURPOSE: 9.0 acre feet, originally allocated
to the Columbia Broadcasting System, Inc.,
a New York Corporation.

Date: August 7, 1969

(1) 7089

Columbia Broadcasting System, Inc.,
7800 Beverly Boulevard
Los Angeles, California 90056

Gentlemen:

In conjunction with the water right license and agreement entered into by the Columbia Broadcasting System, Inc., and the City of Torrance, it is also understood and agreed as follows:

The City of Torrance shall:

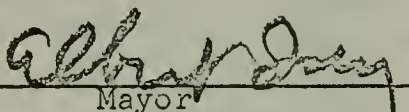
1. Pay directly to the Central and West Basin Water Replenishment District any and all pump assessments and any and all other charges levied on the waters produced hereunder by the City of Torrance.
2. Pay all power costs and other production costs in connection with the production of the water referred to herein.
3. Prepare and file all necessary reports and documents in connection with the water rights leased herein, required by the Central and West Basin Water Replenishment District.
4. Make the necessary filings with the State Water Rights Board, in connection with the waters produced by City of Torrance hereunder, as provided in Part 5 of Division 2 (Sections 4999 et seq.) of the Water Code of the State of California, as amended, and prepare and file any other reports, filings or the like as may be required, during the term hereof, from time to time by proper authority, in connection with the rights leased hereunder.

as Exhibit A.

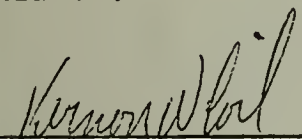
COLUMBIA BROADCASTING SYSTEM, INC., warrants that it has 9.50 acre-feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 9.50 acre-feet during period of October 1, 1969, through September 30, 1970.

Dated: FEB 05 1970

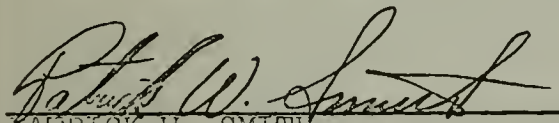
CITY OF TORRANCE

By 
Mayor

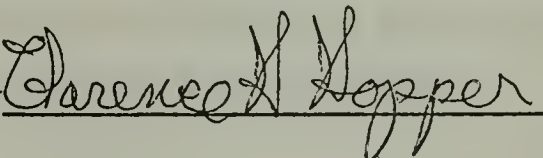
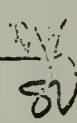
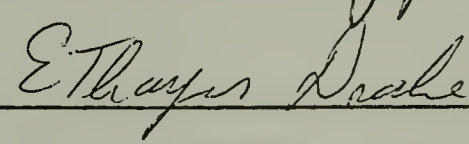
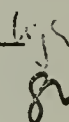
ATTEST:


City Clerk

APPROVED AS TO FORM:


PATRICK W. SMITH
Deputy City Attorney

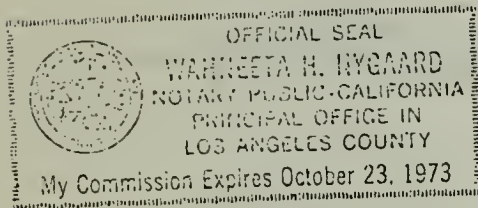
COLUMBIA BROADCASTING SYSTEM, INC.

By  
By  

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss
CITY OF TORRANCE }

On February 5, 1970 before me, the undersigned, a Notary Public in and for said County and State, personally appeared ALBERT ISEN, known to me to be the Mayor and VERNON W. COIL, known to me to be the City Clerk of the municipal corporation that executed the within instrument, and acknowledged to me that they executed the same on behalf of said municipal corporation.

WITNESS my hand and official seal.



Wanneeta H. Nygaard
Notary Public in and for said
County and State

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss

On December 2, 1969, before me, the undersigned, a Notary Public in and for said County and State, personally appeared Clarence H. Happer, known to me to be the Vice President, and Chayer Drake, known to me to be the Assistant Secretary of COLUMBIA BROADCASTING SYSTEM, INC., the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of the corporation.

WITNESS my hand and official seal.

Marie I. Nelson
Notary Public in and for said
County and State

MARIE I. NELSON
NOTARY PUBLIC, State of New York
No. 60-2954630
Qualified in Westchester County
Term Expires March 30, 1971

WATER RIGHT LICENSE AND AGREEMENT

For a valuable consideration, COLUMBIA BROADCASTING SYSTEM, INC., hereby grants to the CITY OF TORRANCE: a license to extract 9.50 acre-feet of licensor's Adjudicated Right, allocated to licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961, and entered in Los Angeles Superior Court Case 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al." during the period commencing October 1, 1969, and continuing to and including September 30, 1970.

Said License is granted, subject to the following conditions:

- (1) Licensee to pay licensor the sum of One Dollar (\$1.00).
- (2) Licensee shall exercise said right and extract the same on behalf of COLUMBIA BROADCASTING SYSTEM, INC., during the period above specified and put the same to beneficial use and licensee shall not by the exercise hereunder of said right acquire any right to extract water independent of the rights of licensor.
- (3) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
- (4) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
- (5) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license.
- (6) Licensee shall act in every respect in accordance with its letter dated August 7, 1969, to COLUMBIA BROADCASTING SYSTEM, INC., stipulating pertinent terms and conditions in conjunction with this license, a copy of which letter is attached hereto and made a part hereof by this reference, said letter identified

5. Prepare, file and furnish a copy to Columbia Broadcasting System, Inc., of all reports, documents and papers necessary and advisable for the preservation of Columbia Broadcasting System's rights hereby leased, without cost to them.

CITY OF TORRANCE

By Robert J. [Signature]
Mayor

ATTEST:

[Signature]
City Clerk

APPROVED AS TO FORM:

[Signature]
PATRICK W. SMITH
Deputy City Attorney

The terms and conditions contained herein are approved and accepted.

COLUMBIA BROADCASTING SYSTEM, INC.

By [Signature]
Vice President

By [Signature]
Assistant Secretary

1549

BK D4601 PG 841

When Recorded, Return to

Watson Land Company
3435 Wilshire Boulevard
Los Angeles, Cal. 90005

DEED OF WATER RIGHTS

For a valuable consideration, receipt of which is hereby acknowledged,

DOMINGUEZ WATER CORPORATION hereby sells and transfers to the
WATSON LAND COMPANY:

The Right to extract 37.6 acre feet of grantor's Adjudicated Right
allocated to grantor (or predecessors in interest) under and pursuant to
Judgment dated August 18, 1961 and entered in Los Angeles Superior Court
Case No. 506806 entitled "California Water Service Company, et al., vs.
City of Compton, et al., "

Dated: December 24, 1969

WATSON LAND COMPANY

RECORDED IN OFFICIAL RECORDS
OF LOS ANGELES, CALIF.

20 Min. 10 AM JAN 8 1970
Past

RAY E. LEE, Registrar-Recorder

DOMINGUEZ WATER CORPORATION

By William Watson
Pres.

By Shirley A. Furttsch

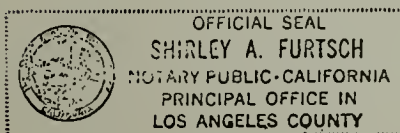
By C. M. Brewer
President

By Alex Lawrence
Secretary

STATE OF CALIFORNIA)
) SS.
COUNTY OF LOS ANGELES)

On this 24th day of December, 1969, before me, the undersigned, a
Notary Public in and for said State, personally appeared C. M. BREWER,
known to me to be the President, and ALEX LAWRENCE, known to me to be
the Secretary of DOMINGUEZ WATER CORPORATION, the corporation that
executed the within instrument and known to me to be the persons who executed
the within instrument on behalf of the corporation.

WITNESS my hand and official seal.



Shirley A. Furttsch
Shirley A. Furttsch
Notary Public in and for the State of
California, with principal place of
business in Los Angeles County.

My Commission expires July 10, 1971.

1549

DOCUMENTARY TRANSFER TAX \$ 1.00
COMPUTED ON FULL VALUE OF PROPERTY
ENCUMBRANCES REMAINING
Signature of Declarant or Agent deferring tax, if any

SAMPLE

(Suggested Form for Selling Water Rights)

SAMPLE

DEED OF WATER RIGHTS

For a valuable consideration, JOHN SMITH hereby sells and transfers to the JOHN DOE COMPANY:

The Right to extract _____ acre-feet of grantor's Adjudicated Right allocated to grantor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al."

Dated: _____

JOHN DOE COMPANY

JOHN SMITH

By _____

By _____

Title _____

Title _____

WATER RIGHT LICENSE AND AGREEMENT

For a valuable consideration, THE JOHN DOE COMPANY hereby grants to John Smith: a license to extract _____ acre-feet of licensor's Adjudicated Right allocated to licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961, and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al." during the period commencing October 1, 196_ and continuing to and including September 30, 196_.

Said License is granted, subject to the following conditions:

- (1) Licensee shall exercise said right and extract the same on behalf of JOHN DOE COMPANY during the period above specified and put the same to beneficial use and licensee shall not by the exercise hereunder of said right acquire any right to extract water independent of the rights of licensor.
- (2) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
- (3) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
- (4) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license.

JOHN DOE COMPANY warrants that it has _____ acre-feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said _____ acre-feet during period of October 1, 196_ through September 30, 196_.

Dated: _____

JOHN DOE COMPANY

JOHN SMITH

By _____

By _____

Title _____

Title _____

APPENDIX B

GROUND WATER EXTRACTIONS AND
GROSS WATER SUPPLY

APPENDIX B
TABLE OF CONTENTS

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B-1	Ground Water Extractions	115
B-2	Gross Water Supply	119

TABLE 8-1
GROUND WATER EXTRACTIIONS
IN ACRE-FEET

		PRODUCTION												TOTAL
STATE	OWNERS	1969			1970									
WELL	OFFICE													
NUMBER	NATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	
A B C NURSERY, INC														
35/13W-29F115	1	2.74	1.37	1.30	.65	1.18	1.80	3.17	4.16*	4.82	4.55	4.60	3.78	34.12
AMERICAN PLANT GROWERS INC														
45/13W-19J065	229M	2.76	1.33	1.09	1.18	1.95	2.37	3.93	2.23	3.23	1.54	3.43	3.41	28.45
ATLANTIC RICHFIELD COMPANY														
45/13W-16R025	11	144.83	183.64	184.33	199.41	175.46	123.45	150.78	234.42	234.28	231.70	215.33	203.06	2280.69
45/13W-21M025	4	0	0	0	0	.48	0	2.74	3.16	.75	0	.49	0	7.62
45/13W-21M055	7	7.50	1.88	107.65	35.44	23.42	22.19	14.26	7.99	22.20	25.23	3.33	5.84	276.93
45/13W-21M065	8	106.42	121.85	78.99	149.46	62.06	135.08	131.33	128.18	82.01	136.27	149.00	144.18	1424.83
45/13W-21M075	12	0	0	0	278.81	332.41	367.43	347.10	362.36	346.44	354.08	358.21	355.77	3102.61
45/13W-21J025	10	194.55	204.62	232.85	218.97	190.31	208.23	159.21	179.27	198.54	187.37	200.41	181.53	2355.86
45/13W-22F015	5	102.82	111.12	113.95	27.85	41.89	.62	38.95	125.90	0	.22	113.44	113.83	790.59
45/13W-22F015	9	99.94	96.23	100.03	46.65	9.39	.27	52.02	31.10	138.86	132.85	12.80	1.70	721.84
TOTALS		656.06	719.74	817.80	956.59	835.42	857.27	896.39	1072.38	1023.08	1067.72	1053.01	1005.91	10960.97
CALIFORNIA WATER SERVICE COMPANY														
35/14W-29F015	2001	80.56	48.87	31.97	54.37	7.34	50.09	75.53	44.52	68.97	83.17	82.88	67.49	695.76
35/14W-29J015	2201	120.41	91.72	62.26	49.36	37.32	61.62	100.01	48.15	108.31	128.88	127.59	114.81	1050.44
35/14W-32A015	801	23.43	26.13	27.40	26.72	26.39	8.52	0	0	0	0	0	0	138.59
45/14W-16F015	2501	18.84	15.78	10.38	10.64	16.81	18.68	22.61	18.44	31.56	57.38	49.92	15.40	286.44
TOTALS		243.24	182.50	132.01	141.09	87.86	138.91	198.15	111.11	208.84	269.43	260.39	197.70	2171.23
CHANDLERS PALOS VERDES SAND-GR CORP														
45/14W-27N015	TORR2	0	0	0	3.38	3.88	3.90	7.68	5.56	5.71	5.65	7.56	11.90	55.22
45/14W-28J015	TORR1	12.22	5.20	4.98	5.94	3.40	5.74	4.07	4.07	8.27	5.45	4.09	5.07	68.50
45/14W-36K015	RANCH	1.99	.90	.85	.62	0	0	0	0	0	0	0	0	4.36
45/14W-35F065	SINCE	7.59	2.78	0	3.69	10.27	11.66	14.33	9.04	13.68	9.86	14.26	15.90	113.02
45/14W-35F025	PLANT	14.61	8.25	14.28	12.19	2.78	6.25	6.67	7.70	6.22	7.11	11.83	4.93	102.82
TOTALS		36.41	17.13	20.11	25.82	20.29	27.55	32.75	26.37	33.88	28.07	37.74	37.80	343.92
DESSER ENTERPRISES														
45/13W-150015	878H	.08*	0*	0*	.08*	0*	0*	0*	0*	.03*	0*	.03*	0*	.22
DOMINGUEZ WATER CORPORATION														
45/13W-07L015	30	3.31	2.92	3.12	7.47	3.12	.46	0	0	0	0	0	0	16.40
45/13W-07L015	30A	.94	.80	.90	.99	.90	.14	0	0	0	0	0	0	4.67
45/13W-11K035	T0Y2	0	4.26	4.42	2.17	.24	1.76	1.81	8.76	7.33	4.26	2.23	7.89	45.13
45/13W-15	S MP001	570.21	448.71	455.34	390.78	366.01	345.14	477.97	412.21	411.77	545.53	436.05	355.76	5215.48
45/13W-17D015	19	64.93	0	0	0	.09	0	.08	44.01	73.69	76.14	75.44	72.14	406.52
45/14W-100015	32	179.51	52.91	0	160.85	184.75	36.34	169.76	246.62	241.95	255.48	236.90	221.46	1986.53
45/14W-100045	33	102.92	218.64	295.27	97.06	94.16	249.95	233.55	220.67	200.29	271.60	273.86	241.62	2499.59
TOTALS		921.82	728.24	759.05	655.32	649.27	633.79	883.17	932.27	935.03	1153.01	1024.48	898.87	10174.32
FLETCHER OIL AND REFINING COMPANY														
45/13W-30A055	3	5.32	7.14	7.24	5.89	4.85	5.69	5.40	5.79	4.67	4.95	4.70	4.78	66.42
FUJIMOTO, SAMUEL R AND RAYMOND S														
35/13W-30A105	1	.59	.43	.47	.42	.50	.97	.93	.60	.86	.84	.71	.74	8.06
HAWTHORNE, CITY OF														
35/14W-09N045	4	12.71	12.24	2.89	7.81	4.90	11.61	11.51	8.28	8.53	0	5.97	20.40	102.94
35/14W-09N055	12	103.47	104.05	91.92	106.24	108.19	125.88	116.39	105.83	108.92	123.09	130.50	125.51	1349.99
35/14W-09P015	8	18.90	17.13	13.68	16.30	14.53	17.97	15.97	11.41	12.11	0	8.30	29.42	175.72
35/14W-09O035	11	76.73	32.52	21.92	34.28	34.91	17.79	25.19	13.03	31.63	7.87	0	0	255.87
TOTALS		171.81	165.94	170.41	160.63	162.62	173.25	169.06	138.55	161.19	130.96	144.77	175.33	1884.52
HILLSIDE MEMORIAL PARK														
25/14W-19K035	2	9.54	4.85	4.34	.94	1.50	3.56	11.93	8.47	12.28	10.22	12.42	7.07	87.21
HOLLYWOOD TURF CLUB														
25/14W-34F015	OUT02	9.67	6.99	6.19	1.76	4.56	7.46	14.13	15.72	14.53	14.97	.09	10.17	106.24
25/14W-34L025	IN001	17.18	8.84	14.05	4.38	10.34	11.10	18.33	18.91	19.28	21.39	24.34	25.14	193.28
TOTALS		26.85	15.83	20.24	6.14	14.90	18.56	32.46	34.63	33.81	36.36	24.43	35.31	299.52

TABLE 8-1
GROUND WATER EXTRACTIIONS
(CONTINUED)
IN ACRE-FEET

STATE WELL NUMBER	OWNERS DESIG- NATION	PRODUCTION												TOTAL	
		1969			1970										
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT		
WORIL OIL CORPORATION															
45/14W-03L025	T0002	11.19	76.25	48.87	5.01	0	3.16	0	0	0	46.67	109.41		300.56	
45/14W-03L035	T0003	118.96	77.83	79.56	84.80	92.26	66.43	106.93	104.14	99.14	104.67	103.56	99.96	1138.24	
45/14W-03L045	T0004	70.90	38.07	107.00	95.12	87.28	63.93	104.84	103.47	91.04	100.76	61.14	5.50	929.05	
45/14W-03M015	T0006	160.01	157.43	127.80	158.98	142.94	146.42	138.37	141.16	120.20	141.72	142.36	140.49	1717.88	
TOTALS		361.06	349.58	363.23	343.91	322.48	279.94	350.14	348.77	310.38	347.15	353.73	355.36	4085.73	
OTANI, CHISATO															
35/14W-33P045	OTAN3	5.54	1.72	2.76	.15	1.57	2.40	4.79	4.26	6.56	7.18	4.93	3.84	45.66	
35/14W-34N045	SCFCO	1.70	0	1.04	.62	.67	1.28	2.39	4.16	2.65	4.82	3.44	4.08	26.85	
TOTALS		7.24	1.72	3.80	.77	2.20	3.68	7.18	8.42	9.21	12.00	8.37	7.92	72.51	
PACIFIC CREST CEMETFRY COMPANY															
35/14W-33E015	743	5.12	1.44	1.36	.08	.65	1.13	3.77	3.37	4.00*	4.00*	3.10*	3.40*	31.42	
PALOS VERDES REGONIA FARM															
45/14W-21N015	1	.23*	.16*	.11*	.19*	.15*	.15*	.10*	.25*	.30*	.27*	.30*	.25*	2.46	
PARK WATER COMPANY															
35/14W-22K015	15C	31.20	17.99	17.78	19.96	18.24	19.14	25.86	37.28	30.98	32.52	25.92	25.90	302.79	
35/14W-22N015	15R	.21	0	.04	1.24	.01	.05	.26	.91	.20	3.90	4.09	2.25	13.16	
35/14W-22R025	154	0	0	0	0	0	.02	.01	.03	.03	3.28	2.48	.85	6.70	
TOTALS		31.41	17.99	17.82	21.20	18.27	19.21	26.13	38.22	31.21	39.70	32.49	29.00	322.65	
ROMAN CATHOLIC ARCHBISHOP OF L A															
25/14W-180015	HOLYX	14.19	1.22	2.49	2.34	2.46	3.20	12.89	11.25	9.74	26.95	22.28	15.21	124.22	
SHEETS, ESTHER M															
35/13W-32E025	R23F	.03	.06	.06	.06	.02	.05	.09	.07	.12	.37	.21	.13	1.27	
SHELL OIL COMPANY															
45/13W-09A015	D0003	0	0	0	0	0	11.24	51.75	32.83	22.06	48.29	59.33	86.75	312.25	
45/13W-09H025	D0005	277.89	257.63	257.10	241.17	194.80	193.89	93.43	137.78	180.59	185.51	178.93	141.44	2340.16	
45/13W-10E035	D0004	0	0	0	38.85	64.17	67.91	79.08	105.47	94.42	40.37	43.84	71.50	605.57	
45/13W-21R015	W1002	92.31	83.43	100.08	98.54	87.62	89.96	94.18	90.87	41.85	25.26	22.56	29.60	856.26	
45/13W-21R025	W1003	0	0	0	0	0	0	0	15.66	.28	0	0	0	15.94	
TOTALS		370.20	341.06	357.18	378.56	346.55	363.00	318.44	382.61	339.20	299.43	304.66	329.29	4130.18	
SHINODA BROS INC															
35/14W-35M075	NEW	1.48	1.28	.94	.60	1.12	1.52	1.54	1.46	1.26	1.55	1.38	1.47	15.60	
SOUTHERN CALIFORNIA EDISON COMPANY															
35/14W-34R025	FRF54	.16	.13	.22	.14	.08	.04	1.10	.81	.71	.46	.78	.67	5.30	
45/13W-14A075	DULNY	.14	.08	.07	.05	.04	.05	.04	.15	.11	.18	.04	.26	1.21	
45/13W-27A025	HANSEN	.04	.05	.02	.04	.01	.03	.03	.03	.12	.01	.03	.07	.48	
TOTALS		.34	.26	.31	.23	.17	.12	1.17	.99	.94	.65	.85	1.00	6.99	
SOUTHERN CALIFORNIA WATER COMPANY															
35/14W-03K015	YU001	65.82	66.43	78.13	67.86	71.85	78.60	68.93	57.58	46.62	66.22	55.99	55.37	779.40	
35/14W-03K025	YU002	52.65	32.78	42.08	21.71	31.02	51.51	47.02	65.71	58.86	66.43	68.51	35.43	573.71	
35/14W-03K035	YU003	28.56	27.10	26.60	23.43	20.94	24.23	6.60	0	23.06	26.13	26.44	24.83	257.94	
35/14W-04N015	T0001	57.18	15.78	0	29.84	42.30	36.57	49.09	48.73	42.86	63.56	60.50	57.45	503.86	
35/14W-04N025	T0002	0	0	0	0	7.27	10.61	1.35	.44	0	0	0	0	15.67	
35/14W-11G025	W1001	48.59	46.76	44.99	43.61	41.24	39.63	27.88	22.59	28.18	49.00	62.04	50.93	505.26	
35/14W-11R025	RA003	72.15	15.09	26.19	24.79	62.00	60.09	23.99	9.62	36.40	56.71	61.30	43.64	492.06	
35/14W-11J035	S0001	17.80	10.93	19.16	7.35	8.75	18.44	3.21	0	1.29	41.86	55.20	32.56	216.55	
35/14W-13J045	S0004	27.56	11.04	34.69	13.54	36.34	47.03	8.95	.34	4.00	21.35	36.13	23.40	264.39	
35/14W-14A015	FW001	31.27	5.19	0	4.61	43.05	55.74	4.86	.65	.01	0	1.44	36.01	182.83	
35/14W-14D015	129	64.76	55.32	58.02	48.90	61.84	71.37	44.10	29.20	40.35	83.36	90.11	63.06	712.41	
35/14W-21M015	CM001	0	.09	0	0	49.54	57.31	2.28	4.20	0	5.16	9.18	0	127.76	
35/14W-22A015	CM001	48.27	39.30	46.97	50.56	45.71	50.94*	53.33	50.88	55.76	55.65	58.53*	63.99*	619.69	
35/14W-22A025	CM002	21.96	2.76	1.70	12.91	23.76	27.68	32.05	24.82	28.24	36.13	39.21	285.22	285.22	
35/14W-22L015	CO001	54.98	45.28	46.69	49.62	69.80*	33.56	37.86	46.72	43.31	57.11	84.09	55.05	624.07	
35/14W-25P045	DA001	33.06	32.55	29.60	24.50	41.68	29.88	20.35	18.94	23.26	7.96	.23	36.14*	298.15	
TOTALS		624.61	406.40	454.82	423.03	655.26	693.19	431.85	380.42	432.20	634.50	705.82	617.07	6459.17	

TABLE B-1
GROUND WATER EXTRACTIIONS
(CONTINUED)
IN ACRE-FEET

		PRODUCTION												TOTAL	
STATE	OWNERS	1969					1970								
WELL	OFFICE														
NUMBER	NATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT		
INDUSTRIAL CHEM DIV-ALLIED CHEM CORP															
35/14W-18N04S	4	5.78	11.64	7.07	18.82	9.19	6.39	.27	.03	.05	0	0	14.10	73.34	
35/14W-18N05S	5	6.21	11.19	20.71	8.28	12.73	17.14	12.53	10.79	7.78	13.34	17.81	8.79	147.30	
TOTALS		11.99	22.83	27.78	27.10	21.92	23.53	12.80	10.82	7.83	13.34	17.81	22.89	220.64	
INGLEWOOD, CITY OF															
25/14W-28E01S	23	.09	.01	.04	.06	.09	.03	18.43	18.20	17.21	16.68	21.65	19.49	111.98	
25/14W-28F01S	25	15.76	.25	.01	0	.02	20.63	49.12	49.34	45.93	47.58	52.47	45.16	346.27	
25/14W-28M01S	26	25.07	.48	3.49	.35	.02	31.27	35.60	43.71	41.52	46.48	48.58	44.67	321.24	
25/14W-28M02S	29	30.50	.03	2.17	.26	0	35.68	50.37	58.29	59.16	61.62	62.59	59.12	419.79	
25/14W-32C02S	34	46.05	7.52	.02	5.50	.58	74.56	95.85	92.31	90.23	86.28	81.94	79.19	660.03	
25/14W-32F01S	21	49.34	9.19	8.94	8.49	0	14.38	74.03	77.80	76.96	75.86	77.81	74.88	547.68	
25/14W-34C02S	2	2.97	2.26	2.54	1.94	3.24	5.16	4.42	4.84	2.81	4.12	3.04	2.12	39.46	
35/14W-02D01S	35	0	0	0	.29	0	0	0	0	0	0	0	0	.29	
35/14W-03H01S	38	113.38	5.22	.21	.21	0	85.21	117.41	152.48	135.49	118.10	108.55	152.43	988.69	
35/14W-10G02S	30	36.70	37.41	38.77	37.33	27.53	26.04	28.15	27.76	23.74	24.58	27.18	24.97	360.16	
TOTALS		339.86	62.37	56.19	54.43	31.48	292.96	473.38	524.73	493.05	481.30	483.81	502.03	3795.59	
INOSE, KENICHI															
35/13W-29C08S	10	1.46	.92	.80	.43	.85	1.07	1.94	2.05	1.79	2.16	2.31	1.86	17.64	
ISMIRASHI, AKI															
45/14W-24A01S	OUEDA	3.92*	2.60*	2.28*	.41*	2.21*	2.78*	4.81*	4.97*	5.15*	2.74*	4.50*	3.25*	39.62	
JOHNS MANVILLE PRODUCTS CORP															
45/13W-15N01S	WW001	48.69	79.08	102.92	99.51	84.34	93.48	90.79	89.84	91.77	92.68	93.06	20.54	986.70	
LOS ANGELES, CITY OF															
45/13W-31	S MP001	0	0	0	0	0	0	395.78	513.31	501.61	241.28	197.89	503.08	2352.95	
LOS ANGELES COUNTY ALONDRA PARK															
35/14W-27C01S	761	48.83	20.18	43.58	24.98	17.41	51.01	52.67	79.13	54.56	71.44	73.41	80.97	618.17	
LOS ANGELES COUNTY SANIT DIST NO 2															
45/13W-30C01S	A19	10.31	7.82	6.51	13.39	6.52	8.54	7.70	5.93	.26	13.12	4.27	15.01	99.36	
LOS ANGELES COUNTY WWKS DIST NO 13															
45/14W-35E02S	2	.68	.02	.41	.19	6.53	0	3.60	1.60	0	0	0	0	13.03	
LOS ANGELES COUNTY WWKS DIST NO 22															
35/14W-17G02S	2	0	1.15*	2.55	43.98	33.52	43.89	0	0	0	0	0	0	125.09	
LOS ANGELES COUNTY-WESTERN AVF GOLF															
35/14W-11J02S	1397C	25.03	2.25	5.49	3.21	7.42	9.82	37.25	40.00	34.66	17.96	24.68	21.01	248.78	
MANHATTAN BEACH, CITY OF															
35/14W-29003S	11	0	.14	.06	.06	.05	.06	.05	.04	.05	.05	5.02	10.32	15.90	
35/14W-30H02S	13	7.12*	3.52*	0	0	0	0	0	1.77	0	.75	1.51	0	14.67	
TOTALS		7.12	3.66	.06	.06	.05	.06	.05	1.81	.05	.80	6.53	10.32	30.57	
MAYFLOWER NURSRIES															
35/13W-31R07S	ROWY2	.25	.19	.13	.08	.06	.20	.05	.27	.22	.45	.42	.34	2.66	
35/14W-25K06S	NORM1	.28	.12	.12	.04	.10	.02	.05	.02	.01	.01	.18	.09	1.04	
TOTALS		.53	.31	.25	.12	.16	.22	.10	.29	.23	.46	.60	.43	3.70	
MCDONNELL DOUGLAS CORP															
45/14W-01F02S	1	0	0	0	0	0	0	0	0	.01	0	0	.01	.02	
45/14W-01F03S	2	0	.01	0	0	0	0	0	0	0	0	.01	0	.02	
TOTALS		0	.01	0	0	0	0	0	0	.01	0	.01	.01	.04	

TABLE B-1
GROUND WATER EXTRACTIONS
(CONTINUED)
IN ACRF-FEET

		PRODUCTION														TOTAL	
STATE	OWNERS	1969					1970										
WELL	DESIGN																
NUMBER	NATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT				
SPANISH AMERICAN INSTITUTE																	
35/13W-190035	811T	1.15	.62	.75	.60	.75	.67	1.33	1.71	1.34	1.78	1.42	1.32				13.44
SPARKLETT'S DRINKING WATER CORP																	
35/13W-290065	1	2.78	.02	5.43	4.15	4.22	4.63	5.16	4.50	4.80	3.97	4.75	1.79				46.20
35/13W-290075	2	6.08	7.59	4.48	3.96	3.46	3.81	4.27	3.73	4.39	4.80	4.73	8.73				60.03
TOTALS		8.86	7.61	9.91	8.11	7.68	8.44	9.43	8.23	9.19	8.77	9.48	10.52				106.23
STANDARD OIL COMPANY OF CALIFORNIA																	
35/14W-07K045	ER030	7.36	0	0	0	0	0	0	0	0	0	0	0				7.36
35/14W-07K065	ER034	71.10	67.68	68.63	64.95	59.97	48.09	0	0	0	0	0	0				380.42
35/14W-070065	ER032	26.94	22.29	22.05	20.26	12.04	0	0	0	0	0	0	0				103.58
TOTALS		105.40	89.97	90.68	85.21	72.01	48.09	0	0	0	0	0	0				491.36
STAUFFER CHEMICAL CO																	
45/13W-22F025	HA001	20.10	18.09	17.44	16.39	12.97	14.16	13.71	14.52	16.16	16.86	17.23	16.35				193.98
TEXACO INCORPORATED																	
45/13W-27M015	3	205.62	211.75	190.88	190.27	176.46	158.66	166.95	161.12	144.60	165.30	169.18	159.97				2100.76
45/13W-27M035	5	216.05	240.91	218.81	213.29	128.91	98.82	135.64	45.11	74.87	104.08	109.69	96.69				1682.87
45/13W-27M045	6	60.58	80.33	61.84	63.84	11.97	80.71	65.77	64.79	56.04	56.06	59.70	53.20				714.83
TOTALS		482.25	532.99	471.53	467.40	317.34	338.19	368.36	271.02	275.51	325.44	338.57	309.86				4498.46
TORRANCE, CITY OF																	
35/14W-34C025	6	7.23	0	0	0	0	0	41.11	67.44	60.25	110.29	98.66	13.63				398.61
45/14W-10J015	00002	2.91	0	0	0	.78	0	0	2.81	5.08	40.54	40.38	6.47				98.97
45/14W-10K025	4	122.92	0	0	0	29.99	2.17	0	249.22	178.77	310.14	260.16	212.33				1365.70
45/14W-10K035	5	113.45	29.18	6.28	0	24.89	21.41	68.20	62.81	289.46	338.93	347.80	332.48				1634.89
45/14W-16L045	00003	.10	1.78	0	.01	4.03	0	.02	53.75	78.86	105.53	71.79	8.56				324.43
TOTALS		246.61	30.96	6.28	.01	59.64	23.58	109.33	436.03	612.42	905.43	818.79	573.47				3822.60
UNION NURSERY INC																	
35/13W-29G085	831AR	1.16	.93	.82	.54	.99	1.13	1.76	1.82	1.52	1.75	1.86	1.88				16.16
UNION OIL COMPANY OF CALIFORNIA																	
45/13W-31P015	LA003	198.86	192.22	180.74	181.17	159.51	173.51	152.50	149.46	138.70	133.54	138.70	106.12				1907.03
UNITED STATES STEEL CORPORATION																	
45/14W-11F015	4	105.01	101.06	125.04	119.29	112.05	143.98	132.81	135.69	141.14	100.00	85.03	107.53				1408.63
WATSON LAND COMPANY																	
45/13W-15C015	867E	21.48	2.95	5.70	.88	5.50	3.70	4.46	5.39	7.79	12.18	12.49	10.97				93.49
ZIEGLER, MAXWELL T																	
35/13W-31M015	813N	3.19	1.81	2.04	1.54	1.09	1.44	3.62	3.07	4.79	4.69	2.51	3.07				32.86
GRAND TOTALS:		5185.62	4147.68	4255.93	4276.67	4091.71	4513.16	5268.82	5813.81	5959.81	6541.94	6338.86	6053.29				62447.30

* Estimated production

TABLE B-2

GROSS WATER SUPPLY
In acre-feet

Party	: Total : ground water : extractions	: Purchased supply		: Total supply
		: Imported ^{a/}	: Within basin ^{b/}	
ABC Nursery, Incorporated	34.12			34.12
American Plant Growers, Inc.	28.45			28.45
Asahi Fancy Koi, Incorporated	0.00			0.00
Associated Southern Investment Company	0.00			0.00
Atlantic Richfield Company	10,960.97		2,848.46	13,809.43
Ballman, Frank, Estate of	0.00		c/	c/
Boise Cascade Building Company	0.00		d/	d/
California Water Service Co.	2,171.23	11,932.30	4.00	14,107.53
Carson-Madrona Company	0.00		d/	d/
Chandler's Palos Verdes Sand and Gravel Corporation	343.92			343.92
Coast Forest Products	0.00		d/	d/
Columbia Broadcasting System, Incorporated	0.00			0.00
Curtis, Owen W.	0.00			0.00
Delaney, Golda, Estate of	0.00			0.00
Desser Enterprises	0.22			0.22
Dominguez Water Corporation	10,174.32	20,978.71 ^{e/}		31,153.03
El Segundo, City of	0.00	20,751.10		20,751.10
Engelsma, Jake	0.00		d/	d/
Etchemendy, Caroline, Estate of	0.00		c/	c/
Fletcher Oil and Refining Company	66.42		115.94	182.36
Fletcher, Robert G., Daniel S., and Wilfred D.	0.00		d/	d/
Fujimoto, Samuel R. and Raymond S.	8.06			8.06
Gillingham, Florence R., et al.	0.00		d/	d/
Gonzales, Felipe	0.00		c/	c/
Grant, John, Estate of	0.00		c/	c/
Harris Tube Incorporated	0.00		c/	c/
Hawthorne, City of	1,884.52	3,966.05		5,850.57
Hillside Memorial Park	87.31			87.31
Hollywood Turf Club	299.52		237.56	537.08
Industrial Chemical Division, Allied Chemical Corporation	220.64		801.18	1,021.82

GROSS WATER SUPPLY
In acre-feet

Party	: Total :		Purchased supply :		Total supply
	: ground water :		: Imported ^{a/} : Within basin ^{b/} :		
	: extractions :				
Inglewood, City of	3,795.59 ^{f/}		13,041.93 ^{f/}		16,837.52
Inose, Kenichi	17.64				17.64
Ishibashi, Aki	39.62				39.62
Johns-Manville Products Corp.	986.70			306.16	1,292.86
Joughin Torrance Ranch	0.00			<u>d/</u>	<u>d/</u>
Lagerlof, Stanley C.	0.00				0.00
Lermens, Alfred	0.00				0.00
Leuzinger, Emma L.	0.00			<u>c/</u>	<u>c/</u>
Long Beach, City of	0.00		32,462.95 ^{g/}		32,462.95
Lopes, Frank	0.00				0.00
Los Angeles, City of	2,352.95		58,844.00 ^{h/}		61,196.95
Los Angeles County - Alondra Park	618.17			77.75	695.92
Los Angeles County Sanitation District No. 2	99.38			177.74	277.12
Los Angeles County Waterworks District No. 13	13.03		2,592.70		2,605.73
Los Angeles County Waterworks District No. 22	125.09		1,685.40		1,810.49
Los Angeles County-Western Avenue Golf Course	248.78			62.60	311.38
Loyola University of Los Angeles	0.00			158.06	158.06
Manhattan Beach, City of	30.57		6,076.50		6,107.07
Mayflower Nurseries	3.70				3.70
McDonnel Douglas Corporation	0.04			<u>d/</u>	<u>d/</u>
Mobil Oil Corporation	4,085.73			3,457.22	7,542.95
Mori, Roy H. and Kenji	0.00				0.00
Northrup Corporation, Aircraft Division	0.00				0.00
Otani, Chisato	72.51				72.51
Pacific Crest Cemetery Company	31.42			0.97	32.39
Palos Verdes Begonia Farm	2.46				2.46
Palos Verdes Water Company	0.00		15,359.70		15,359.70
Park Water Company	322.65				322.65
Phillips Petroleum Company	0.00			8.53	8.53
Rehor, Josephine P.	0.00			<u>c/</u>	<u>c/</u>
Rockwell, Michael L.	0.00				0.00
Roman Catholic Archbishop of Los Angeles	124.22				124.22
Santa Fe Land Improvement Co.	0.00			<u>d/</u>	<u>d/</u>
Sheets, Esther M.	1.27				1.27
Shell Oil Company	4,130.18			3,895.62	8,025.80

GROSS WATER SUPPLY
In acre-feet

Party	Total		Purchased supply		Total supply
	: ground water :		: Imported ^{a/} : Within basin ^{b/} :		
	: extractions :				
Shinoda Brothers, Incorporated	15.60				15.60
Southern California Edison Co.	6.99			0.38	7.37
Southern California Water Co.	6,459.17	23,227.72 ^{d/}		211.72	29,898.61
Spanish American Institute	13.44				13.44
Sparkletts Drinking Water Corp.	106.23				106.23
Standard Oil Company of California	491.36			13,646.00	14,137.36
Stauffer Chemical Company	193.98			524.57	718.55
Superior Oil Company	0.00				0.00
Texaco, Incorporated	4,498.46			1,944.15	6,442.61
Torrance, City of	3,822.60	20,387.91			24,210.51
Union Nursery, Incorporated	16.16				16.16
Union Oil Company of California	1,907.03			5,578.73	7,485.76
United States Steel Corporation	1,408.63			244.54	1,653.17
Watson Land Company	93.49			47.33	140.82
Wiseburn School District	0.00			62.23	62.23
Ziegler, Maxwell T.	32.86				32.86

- a/ Imports from Metropolitan Water District or member agency unless otherwise noted.
b/ Purchased from municipal, mutual, or public utility water agency.
c/ Domestic use with consumption less than one acre-foot purchased from public utility.
d/ Information not available.
e/ Includes 3,961.71 acre-feet of Central Basin ground water.
f/ Of this amount 28.8% is exported to Central Basin.
g/ Includes Central Basin ground water.
h/ Imported from Owens River-Mono Basin.
j/ Includes 999.7 acre-feet of Central Basin ground water.



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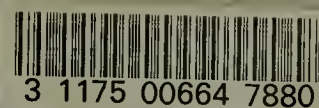
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